TEAC®

SERVICE MANUAL

W-990RX

Stereo Double Reverse Cassette Deck

1 SPECIFICATIONS

仕様

Track System 4-Track, 2-Channel Stereo
Heads 4: 1 Erase and 1 Record/Playback (Rotary, Deck I/II)
Type of Tape Cassette tape C-60 and C-90 (Philips type)
Tape Speed 4.76 cm/sec (1-7/8 ips)
9.5 cm/sec (3-3/4 ips)
(High speed dubbing only)
Motors 6: 1 DC servo capstan motor, 1 DC reel motor and 1 DC mechanism motor (Deck I/II)
Wow and Flutter 0.05 % (WRMS)
Frequency Response (Overall, -20 dB)
25 – 20,000 Hz
(30 – 19,000 Hz ±3 dB), Metal
25 – 20,000 Hz
(30 – 18,000 Hz ±3 dB), CrO_2
25 – 19,000 Hz
(30 – 17,000 Hz ±3 dB), Normal
Signal-to-Noise Ratio (Overall)
59 dB (3 % THD level, Weighted)
69 dB (Dolby B NR In, over 5 kHz)
78 dB (Dolby C NR In, over 1 kHz)
91 dB (dbx NR In, 1 kHz)
Dynamic Range 110 dB (dbx NR IN, 1 kHz, Peak level)
Fast Winding Time Approximately 100 seconds for C-60

Line Input 60 mV, 50 kohms
Outputs Line: 0.3 V for load impedance of 50 kohms or more
Headphones: 8 ohms
Power Requirements 120/220/240 V AC, 50/60 Hz (General Export model)
120 V AC, 60 Hz (U.S.A./Canada model)
220 V AC, 50 Hz (Europe model)
240 V AC, 50 Hz (U.K./Australia model)
Power Consumption 23 W
Dimensions (W x H x D) 435 x 112 x 290 mm
(17-1/8" x 4-7/16" x 11-7/16")
Weight 5.8 kg (12.79 lbs) net
Standard Accessories Wireless Remote Control Unit (RC-306), Input-output connection cords, Batteries (SUM-3, "AA", "R6" type) x 2

- Photos and illustrations may differ slightly from production models.

NOTES:
Improvements may result in SPECIFICATIONS changes.
Value of "dB" in the data refers to 0 dB (0.775 V), except where Specified.

注
1．仕様は改善のため，予告なく変更することがあります。
2．本マニュアルの 0 dB は0.775 V を基準としています。

- dbx Noise Reduction system made under license from dbx, Incorporated. The name "dbx" and the dbx symbol are trademarks of dbx, Incorporated.

- dbxおよびdbxマークはdbxインコーポレーテッドの登録商標です．
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CAUTION
⚠ Parts marked with this sign are safety critical components. They must always be replaced with identical components—refer to the appropriate parts list and ensure exact replacement.

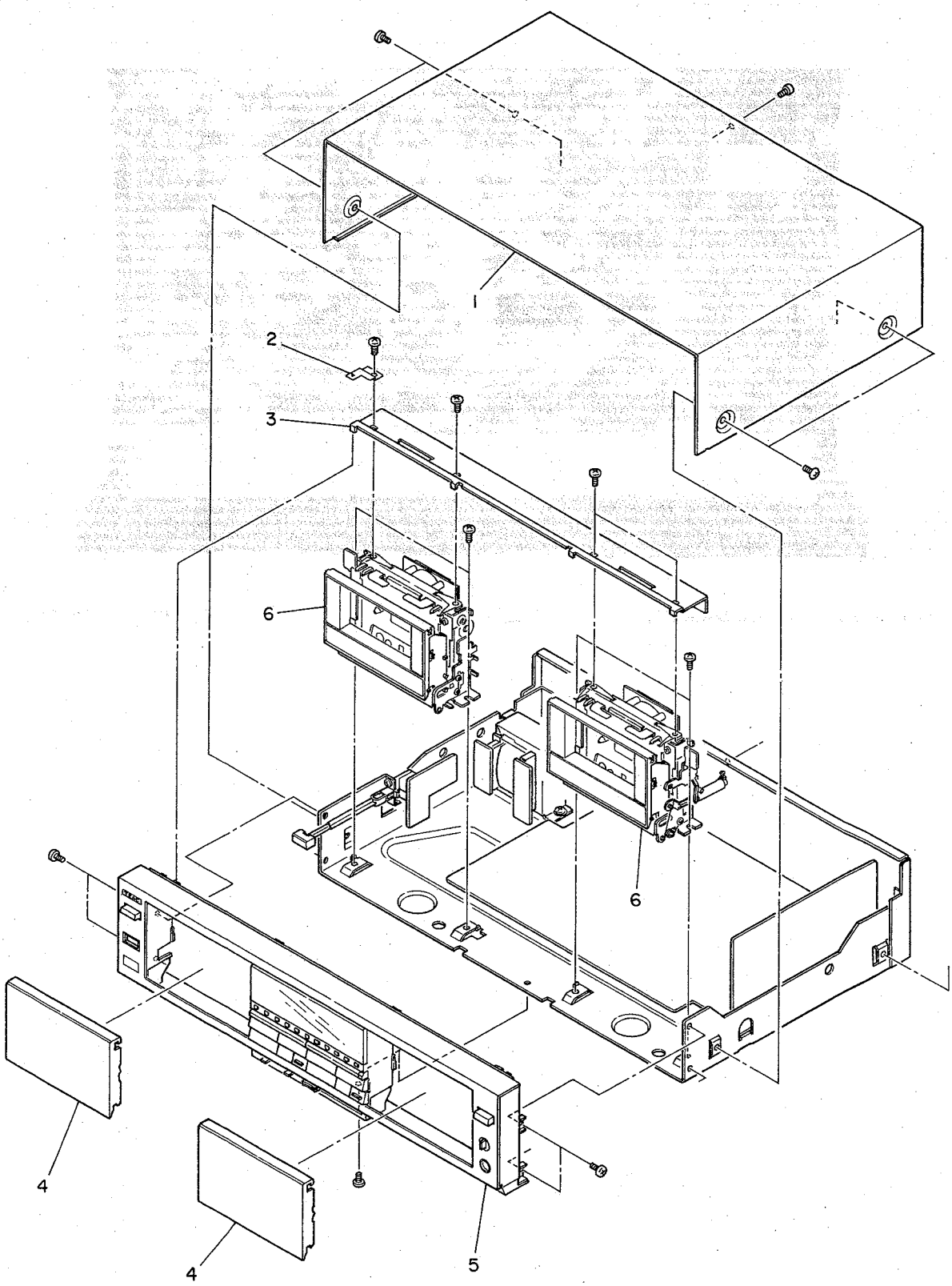
注 意
⚠印は安全重要部品です。交換する時は必ずティアック指定の部品を使用してください。

2 CASE AND FRONT PANEL REMOVAL

外装部品の外し方

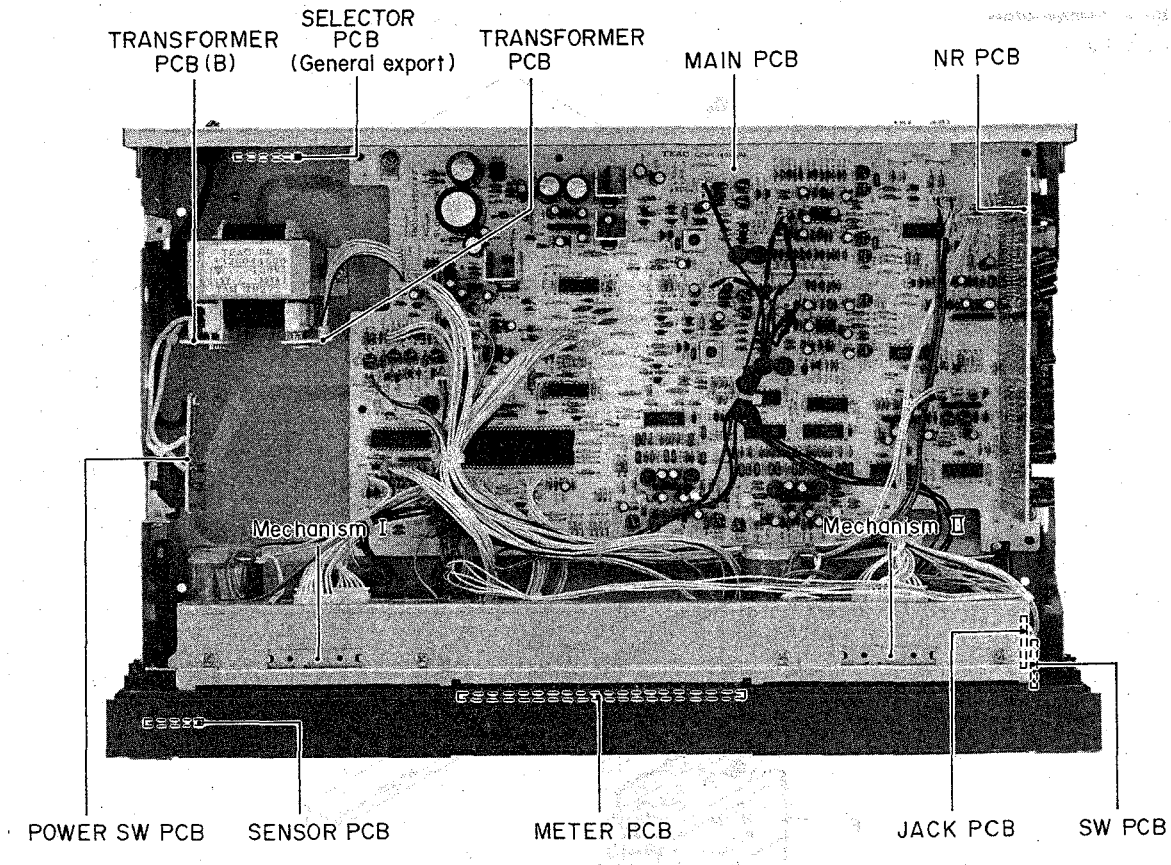
Disassemble in number-order

番号順に外して下さい。



3 PARTS LOCATION

部品配置図



4 MECHANICAL ADJUSTMENT AND CHECKS

機構部の調整と確認

4-1 WOW AND FLUTTER

Note: This measurement should be made at the begining, middle, and the end of the tape.

PLAYBACK

1. Connect a wow-and-flutter meter to the deck as shown in Fig. 4-1.
2. Load and play a TEAC MTT-111 test tape.
3. Check that the reading on the wow-and-flutter meter is within 0.1% (WRMS).

4-2 TAPE SPEED

1. Connect a frequency counter to the deck as shown in Fig. 4-1.
2. Simply press POWER switch to ON to rotate the motor, then continue the motor rotation for approx. 1 minute for warm-up.
3. As soon as the warm-up finishes, load a TEAC MTT-111 test tape with a 3,000 Hz test tone and play the end of the test tape.
4. Adjust each variable resistor to get the following figures.

* Be sure to adjust the high speed after adjusting the low speed.

* To adjust the high speed, connect TP-51 to ground, and set the deck to the play mode.

	Adjustment point		Adjustment value (Hz)
DECK I	HIGH speed	R51	6,020~6,040
	LOW speed	R52	3,010~3,020
DECK II	HIGH speed	R53	6,000~6,020
	LOW speed	R54	3,000~3,010

5. In play mode, check that the following figures are obtained at the beginning and at the end of the tape.

	LOW speed	HIGH speed
Speed deviation	3000 Hz +90, −90 Hz	6000 Hz +180, −180 Hz
Speed drifting	Within 60 Hz	Within 120 Hz

4-1 ワウ・フラッタ

注：テープの巻始め，中間，巻終りで測定する。

1）再生

1.図4-1のようにワラ・フラッタ・メータを接続し，

2.テストテープMTT-111を再生する。

3.ワウ・フラッタ値：0.1%WRMS（聴感補正）以内であることを確認する。

4-2 テープスピード

1.図4-1のように周波数カウンタを接続する。

2.電源を入れ，約1分間ウォーミング・アップしたのち

3.テストテープMTT-111(3KHZ)の巻終り部を再生する。

4.周波数値が下記特性となるよう，各調整VRを調整する。

* 必ずハイ・スピード調整後ロー・スピードを調整する.

* ハイ・スピード調整する時は，TP51 を GND に接続しデッキを PLAY 動作にする.

	調整個所		調整値(Hz)
DECK I	ハイスピード	R51	6,020～6,040
	ロースピード	R52	3,010～3,020
DECK II	ハイスピード	R53	6,000～6,020
	ロースピード	R54	3,000～3,010

5 巻始めから巻終りまで再生し，速度偏差および変動巾を確認する。

	ロースピード	ハイスピード
速度偏差	3,000Hz＋90,－90Hz	6,000Hz＋180,－180Hz
変動幅	60Hz以内	120Hz以内

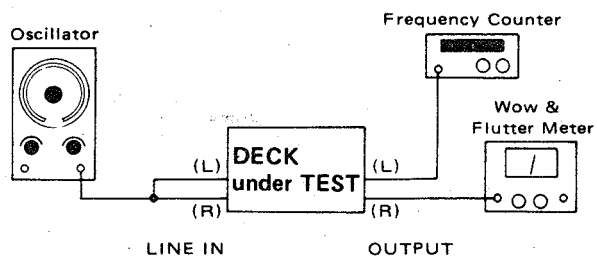


Fig. 4-1

4-3 REEL TORQUE

1. Load the cassette torque meter on the deck and read the pointer indication on the dial scale for each tape transport operation. The measured torque should be within the following specified values:

Specifications:

Take-up: 30～75 g-cm (0.42～1.04 oz-inch)

Supply: 3～10 g-cm (0.056～0.139 oz-inch)

F.F./REW: 110 g-cm (1.53 oz-inch) or more

4-3 リール・トルク

1.カセット型トルク・メータによる測定値が下表の範囲内であることを確認する。

テイクアップ・トルク： 30～75g・cm

バックテンション・トルク：3～10g・cm

早送り/巻戻しトルク： 110g・cm以上

4-4 PINCH ROLLER PRESSURE

Hook a spring scale to the pinch roller arm, and read the scale, by pulling down words, when the pinch roller just stops in the play mode, the reading should be 250 g ~ 350 g (8.8 oz ~ 12.4 oz).

4-5 CAPSTAN ASS'Y THRUST CHECK

Check that the capstan fly wheel is pressed to the capstan housing side by the capstan holder.

4-6 LUBRICATION

Lubrication is only required when parts are replaced. For this purpose, use the oil specified below.

Oil: TEAC spindle oil (from TEAC TZ-255 oil kit),
Mobil D.T.E. Oil Light, or equivalent

Apply a drop of oil with an oil applicator to a point about 1/3 the way down the shaft (from the free end) of the flywheel, then insert the shaft into the capstan housing.

4-7 VOLTAGE CONVERSION (General Export Models only)

1. ALWAYS DISCONNECT THE POWER LINE CORD BEFORE MAKING THESE ADJUSTMENTS!
2. Locate the voltage selector on the rear panel.
3. Using a regular screwdriver, turn the selector until the numerals corresponding to the voltage requirements of your area appear.

4-4 ピンチ・ローラ圧着力

1. ピンチ・ローラアームにバネ秤を掛け，再生モードにする。秤を下方に引いて，ピンチ・ローラの回転が停止する時の値を読む：250g～350g以内であること。

4-5 キャプスタン・シャフト・スラスト

1. キャプスタン・フライホイルがキャプスタン・ホルダによって手前側に押されていることを確認する。

4-6 注油

注油は部品が交換される時のみ必要です。下記指定のオイルを使用すること

オイル：TEACスピンドルオイル(TEACTZ-255オイルキットより)
モービルD・T・Eオイル・ライトメは相当品

1. フライホイル軸の先端から約1 3下った軸面へ，注油器にてオイル1滴を注油後，フライホイル軸をキャプスタン・ハウジングへそう入する

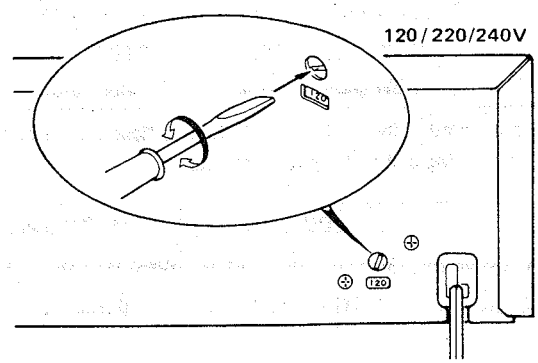


Fig. 4-2

5 ELECTRICAL ADJUSTMENT AND CHECKS

アンプ部の調整と確認

PRECAUTIONS

1. Before performing adjustments and checks clean and demagnetize the entire tape path.
2. Make sure the deck is properly set for the voltage in your locality.
3. In general, adjustments and checks are made in the order of L-ch then R-ch. Double REF. Nos. and test point designations indicate L-ch/R-ch. (Example: R11/R21)
4. 0 dB is referenced to 0.775 V. If an AC voltmeter that references 0 dB to 1 V is used, appropriate compensation should be made.
5. The AC voltmeter used in the procedures must have an input impedance of 1 M-ohmes or more.
6. Note the "Deck settings" at the top of each chart. The settings apply to all check for a specific chart unless explicitly stated otherwise.
7. Since this deck has an automatic tape selector, be sure to use test tapes that have tape position detecting holes.

注意

1. アンプ部の調整・確認の前に，テープ走行系の消磁と清掃を行なってください。
2. 特に指定の無い限り，調整はLch,Rchの順序で行なって下さい。
   尚R11/R21のように記されている回路番号はLch/Rchを示します。
3. 0dB＝0.775V
4. 測定に使用するレベル計の入力インピーダンスは1MΩ以上のものを使用してください。
5. 本機はテープ・セレクタ自動検出機構になっていますので，テスト・テープは必ずテープ・ポジション検出孔のあるものを使用して下さい

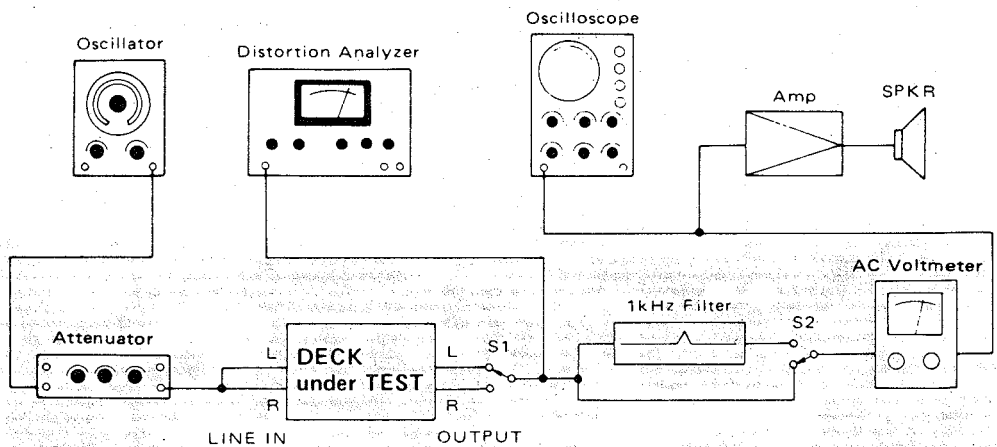


Fig. 5-1 Basic test setup

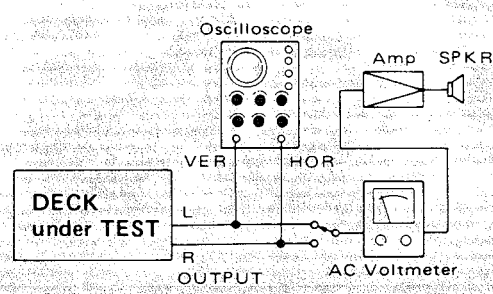


Fig. 5-2 Test setup for azimuth check

5-1 ADJUSTMENTS AND TEST POINT LOCATIONS
調整及び測定個所

Function 調整機能	Adjustments 調整個所	Test points (Measuring point) 測定個所
Specified output level 規定出力レベル	R11 / R21 (DECK Ⅰ) R13 / R23 (DECK Ⅱ)	OUTPUT terminals
Peak level meter レベルメータ指示	R15 / R25 (DECK Ⅰ)	Level meter
PB frequency response 再生周波数特性	R12 / R22 (DECK Ⅰ)	OUTPUT terminals
Bias OSC バイアス発振周波数	L104 (DECK Ⅰ) L103 (DECK Ⅱ)	TP.12 (DECK Ⅰ) TP.11 (DECK Ⅱ)
Record bias 録音バイアス	R18 / R28 (DECK Ⅰ) R16 / R26 (DECK Ⅱ)	OUTPUT terminals
Record level 録音レベル	R19 / R29 (DECK Ⅰ) R17 / R27 (DECK Ⅱ)	OUTPUT terminals

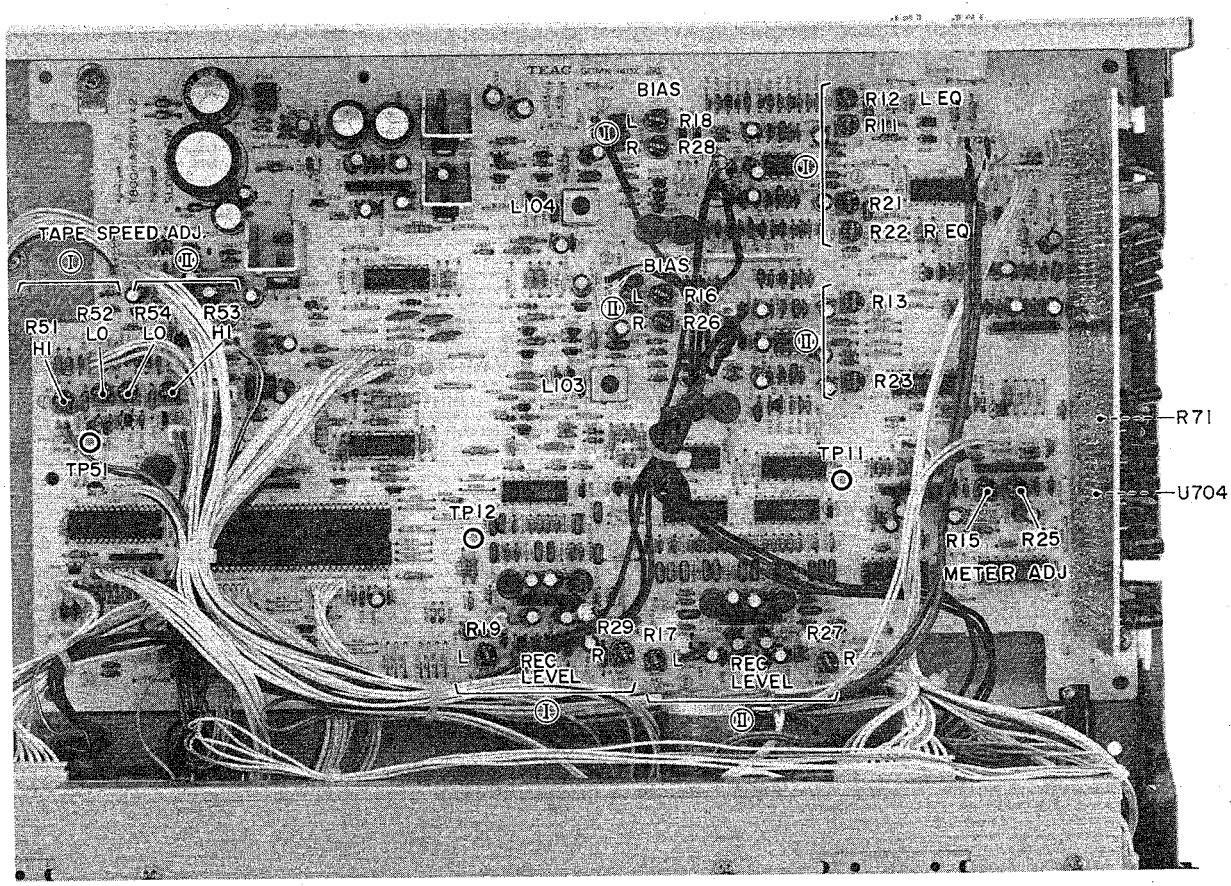


Fig. 5-3

Deck settings:
NR SYSTEM sw: OUT

TEAC test tapes:
MTT-150: For Dolby level calibration
MTT-256: For playback frequency response check for NORMAL
MTT-356: For METAL and CrO_2
MTT-5511: For S/N check with NORMAL

5-2 PLAYBACK PERFORMANCE
再生系

ITEM 調整項目	SETTING 設定	INPUT SIGNAL 入力信号	ADJUST (or CHECK) 調整個所	MEASURING POINT 測定個所 RESULT 調整値	REMARKS 備考
1. REC/PLAY head azimuth 録再ヘッド・アジマス	Connection: Fig. 5-2 接続	MTT-150	Check チェック	OUTPUT: Phase: within 45° 位相 45°以内	Refer to Fig. 5-5
		MTT-256 (10 kHz)	Azimuth screw of R/P head (Fig. 5-4) アジマス調整ネジ	OUTPUT: Max. output at L-& R-ch's (on VTVM) L, R共 最大出力	
2. Specified output level 規定出力レベル	—	MTT-150	R11/R21 (Deck I) R13/R23 (Deck II)	OUTPUT: −5 dB ± 1.5 dB (367mV to 518mV)	Spec. output level 規定出力レベル
3. Peak level meter メータ・レベル	—	MTT-150	R15/R25	PEAK LEVEL METER: 0 dB lit 点灯	
4. Frequency response 周波数特性	NORMAL	MTT-256	R12/R22 (Deck I)	OUTPUT: Fig. 5-8	
	CrO_2	MTT-356	Check チェック	OUTPUT: Fig. 5-8	
5. Signal-to-noise ratio S/N S/N比	Tape: MTT-5511 Play mode	Fully erased MTT-5511 tape (Use bulk tape eraser) バルク・イレーサーで充分消磁された MTT-5511	Check チェック	OUTPUT: 45 dB min.	Ratio of spec. output of −5 dB to noise 基準信号レベルは規定出力(−5dB)レベル

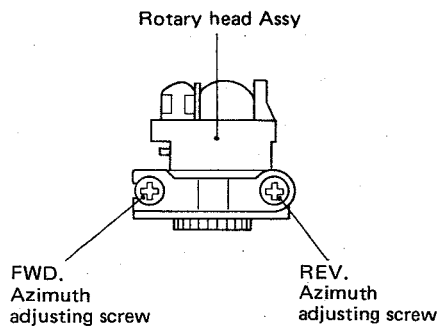


Fig. 5-4

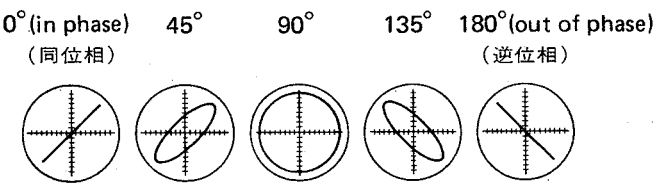


Fig. 5-5

5-3 MONITOR PERFORMANCE
モニタ系

Deck settings:
RECORD-PAUSE mode
NR SYSTEM sw: OUT

ITEM 調整項目	SETTING 設定	INPUT SIGNAL 入力信号	ADJUST (or CHECK) 調整個所	MEASURING POINT 測定個所 / RESULT 調整値	REMARKS 備考
6. Specified LINE input level LINE規定入力レベル	–	LINE IN: 400Hz/–9 dB (275mV)	RECORDING LEVEL cont. (L/R)	OUTPUT: –5 dB (436mV)	Refer to Fig. 5-1
	IMPORTANT: Do not change the setting of the RECORDING LEVEL controls after establishing their setting as above. 注意：以降の調整において RECORDING LEVELつまみを動かさないこと.				
7. Peak level meter ピークレベル指示	–	LINE IN: 400Hz/–9 dB (275mV)	Check チェック	PEAK LEVEL METER: 0 dB lit 点灯	
8. Headphone output level ヘッドホン出力レベル	Connection: Fig. 5-6 接続	LINE IN: 400Hz/–9 dB (275mV)	Check チェック	PHONES: –15 dB ± 3 dB (97.5mV to 195 mV)	8 ohm load 8Ω負荷

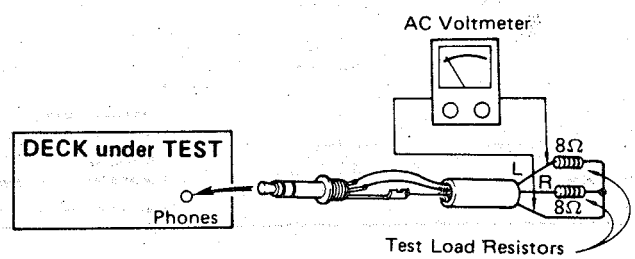


Fig. 5-6 Test setup for headhone check

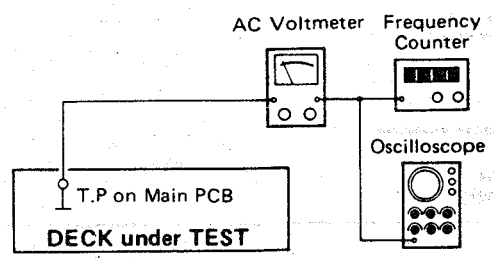


Fig. 5-7 Test setup for bias adjustment

5-4 RECORDING PERFORMANCE
録音系

Deck settings:
NR SYSTEM sw: OUT
REC LEVEL cont. (L/R): Specified position (item 6)
6項の規定位置

TEAC recording test tapes:
MTT-5571 : For METAL
MTT-5561 : For CrO_2
MTT-5511 : For NORMAL

ITEM 調整項目	SETTING 設定	INPUT SIGNAL 入力信号	ADJUST (or CHECK) 調整個所	MEASURING POINT 測定個所	RESULT 調整値	REMARKS 備考
9. Bias osc バイアス周波数の調整	Connection: Fig. 5-7 接続 Record-pause mode	LINE IN: No signal 無信号	L104 (Deck I) L103 (Deck II)	TP12(Deck I) TP11(Deck II) 100kHz±2kHz on frequency counter		Specified bias frequency 規定バイアス周波数
10. Record bias 録音バイアス	Tape: MTT-5511 Rec/play mode	LINE IN: 400Hz & 10kHz alternately/−42 dB (6.15mV) Record and reproduce them. 両信号を交互に録音し、再生する.	R18/R28 (Deck I) R16/R26 (Deck II)	OUTPUT: Nearly equal level at both trequencies 両周波数の録再出力差が同程度になるよう調整		Repeat if the result is un-satisfactory 不十分なら録再を繰返し調整
11. Record level 録音レベル	Tape: MTT-5511 NR SYSTEM sw: dbx	LINE IN: 400Hz/−12 dB (195mV) Record and reproduce them. 信号を録音し、再生する	R19/R29 (Deck I) R17/R27 (Deck II)	OUTPUT: −8dB (308mV)		FWD
12. Total harmonic distortion 総合歪率	Tape: MTT-5571 Tape: MTT-5561 Tape: MTT-5511 Rec/Play mode	LINE IN: 400Hz/−12 dB (195mV)	Check チェック	OUTPUT: 2.0% or less with CrO_2, METAL 2.5% or less with NORMAL		
13. Frequency response 周波数特性	Tape: MTT-5571 Tape: MTT-5561 Tape: MTT-5511	LINE IN: Required signal/ −42 dB (6.15mV)	Check チェック	OUTPUT: Fig. 5-9 to 5-11		If out of spec., recheck # 11
14. Signal-to-noise ratio S/N比	Tape: MTT-5571 Tape: MTT-5561 Tape: MTT-5511	LINE IN: 1kHz/−9 dB (275mV) ↓ no signal	Check チェック	OUTPUT: 46 dB min. [METAL, CrO_2] 45dB min. [NORMAL]		Ratio of specified output of −5dB to noise 基準信号レベルは規定出力(−5dB)レベル
15. Erase efficiency 消去効果	Connection is same as in Fig. 5-1, but engage 1-kHz filter. Record a 1-kHz signal. Rewind tape to midpoint of recorded portion. Erase the recorded portion with no input signal. Find the difference between the 1-kHz portion and the "no-signal" portion. 接続Fig. 5-1.1kHz B.P.F.使用、1kHz信号を録音後中間まで巻戻し一部を消去、未消去部分と消去部分の1kHz出力レベル差を測定.					
	Tape: MTT-5571	LINE IN: 1kHz/+1dB (0.869V) ↓ no signal	Check チェック	OUTPUT: 65 dB min. ratio		Ref. output level: +5dB (1.38V) 基準レベル+5dB
16. Channel seperation チャンネル・セパレーション	● Connection: Fig. 5-1, but do not connect LINE IN (R), and engage 1-kHz filter. ● Set the deck to record mode. Find the difference between the 1-kHz recorded portion (L-ch) and the "no signal" portion (R-ch). R-ch無接続, 1kHz B.P.F.使用, 1kHz録音部分(L-ch)と無信号録音(R-ch)の1kHz再生出力レベルの差を測定.					
	Tape: MTT-5571 (METAL)	LINE IN: L-ch 1 kHz/−9 dB (275mV) R-ch No signal 無信号	Check チェック	OUTPUT: 30 dB min. ratio		

ITEM 調整項目	SETTING 設定	INPUT SIGNAL 入力信号	ADJUST (or CHECK) 調整個所	MEASURING POINT RESULT 測定個所 調整値	REMARKS 備考
17. Adjacent track crosstalk トラック間クロストーク	● Connection: Fig. 5-1, but do not connect LINE IN (L) and OUTPUT (L). ● Record a 125-Hz signal on R-ch and note output level. Invert tape and play R-ch track. Check leakage level against the output reference of previously recorded portion. L-ch無接続:R-chに125Hzを録音し、その再生出力を基準レベルとする。次にテープを反転し、再生したときのR-ch出力レベルとの差を測定。				
	Tape: MTT-5571	LINE IN: L-ch No signal 無信号 R-ch 125Hz/−9 dB (275mV)	Check チェック	OUTPUT: 40dB min. ratio	
18. REC MUTE function REC MUTE効果	Connection: Fig. 5-1, but engage 1-kHz filter. Record a 1-kHz signal. Push REC MUTE button for several seconds. (At this time, make sure LED lights). Rewind and play the tape. Find the difference between the 1-kHz portion and the "no-signal" portion. 1kHz B.P.F.使用. 1kHz信号を録音し、途中REC MUTE釦を押し無信号部を作る。そのテープを再生し、録音部と無信号部の出力レベル差を測定。				
	Tape: MTT-5571	LINE IN: 1kHz/+1dB (0.869mV) ↓ no signal	Check チェック	OUTPUT: 65 dB min. ratio	Ref. output level: +5dB (1.38V)
19. dbx adj.	NR SYSTEM: dbx TAPE sw: METAL Tape: MTT-5571	LINE IN: 400Hz/−9 dB (275mV)	R71	between Pin 13 & 22 on the U704: 15mV DC	

5-5 FREQUENCY RESPONSE
周波数特性

5-5-1 PLAYBACK

Tape : MTT-256 (NORMAL)
Tape : MTT-356 (CrO_2/METAL)

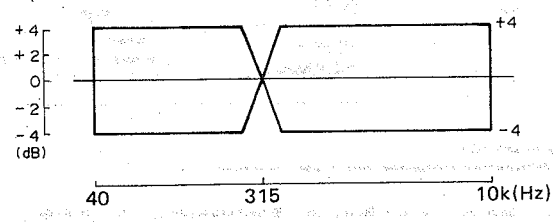


Fig. 5-8 Playback frequency response

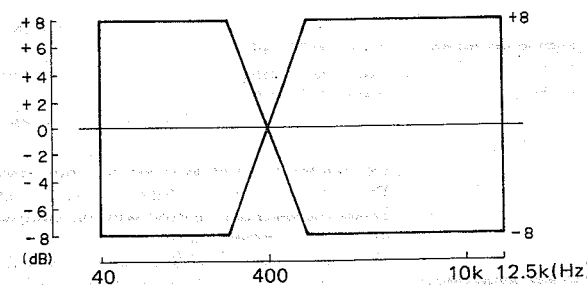


Fig. 5-10 Overall frequency response

MTT-5511: dbx
MTT-5561: □□ B
MTT-5571: □□ C

5-5-2 OVERALL

Tape : MTT-5511 (NORMAL)
Tape : MTT-5561 (CrO_2)
Tape : MTT-5571 (METAL)

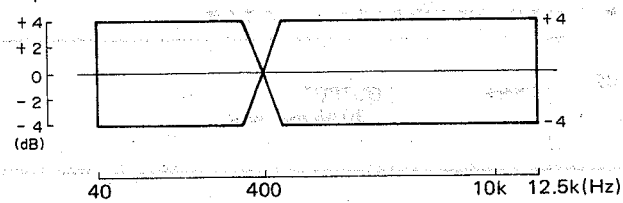


Fig. 5-9 Overall frequency response (Dolby NR: OUT)

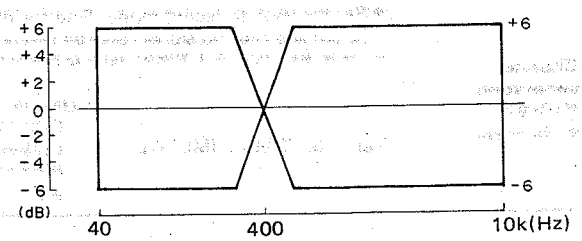


Fig. 5-11 Overall frequency response (Dubbing: Low/High speed)

PARTS LIST SECTION

NOTES:

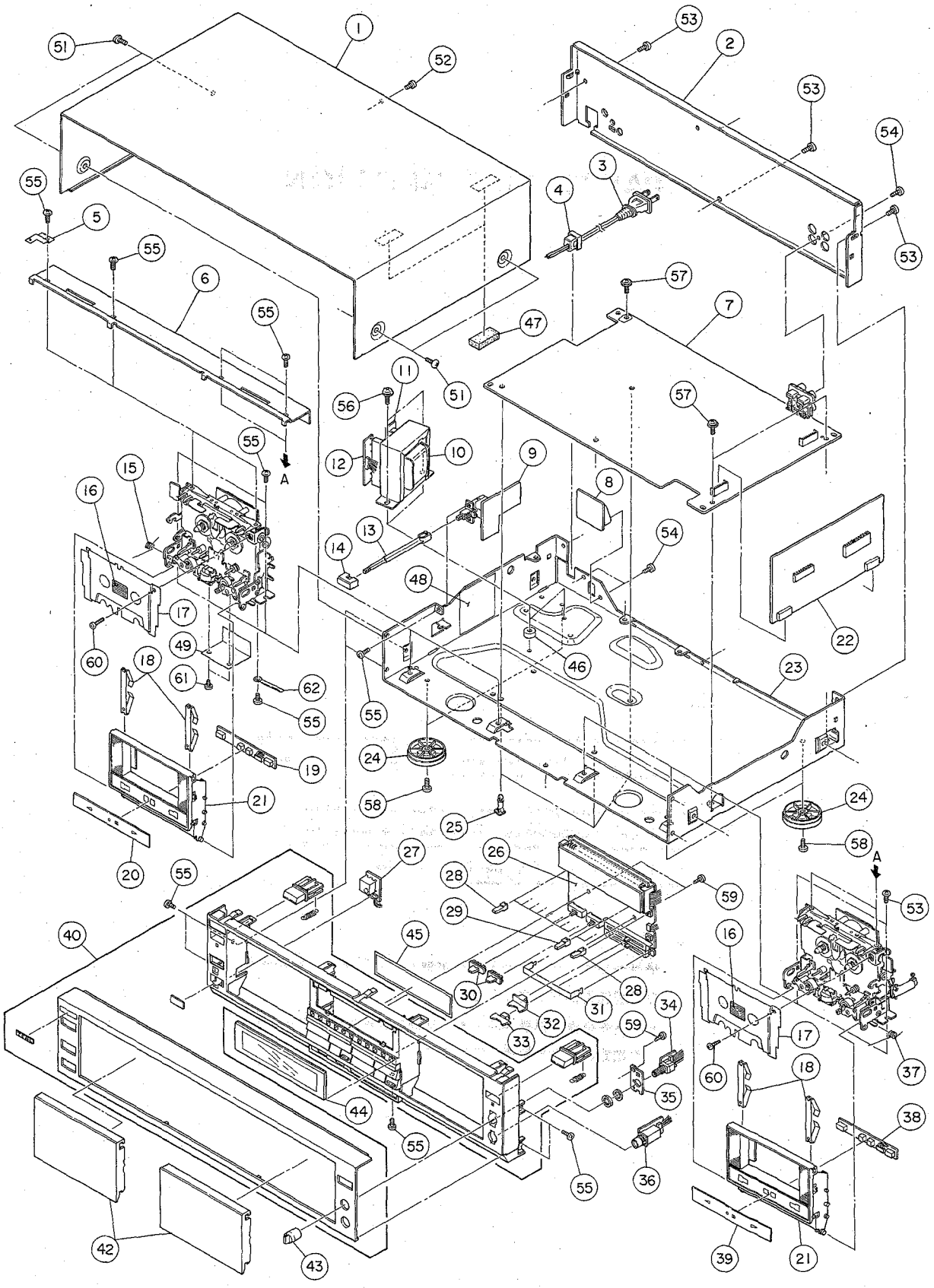
1. As regards the resistors and capacitors, refer to the circuit diagrams and the PCB ass'y drawings included in this brochure.
2. Parts marked with ⚠ this sign are safety critical components. They must always be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.

注　意

1. 標準の抵抗，コンデンサーは省略してあります。回路図及び基板図を参照してください。
2. ⚠印は安全規格重要部品です。交換するときは必ずティアック指定の部品を使用して下さい。

6 EXPLODED VIEWS AND PARTS LIST
分解図とパーツ・リスト

EXPLODED VIEW-1



EXPLODED VIEW-1

REF. NO.	PARTS NO.	DESCREPTION	REMARKS
1- 1	*5800840001	BONNET	
1- 2	*5800950200	PANEL,REAR	
1- 3	⚠*5128027000	CORD,AC [J]	
	⚠*5350010700	CORD,AC SPT-2 [US,C]	
	⚠*5350010800	CORD,AC SPT-1 [GE]	
	⚠*5350011700	CORD,AC CLASS-2 [E]	
	⚠*5128047000	CORD,AC [UK]	
	⚠*5350008300	CORD,AC ASS [A]	
1- 4	⚠*5317003400	BUSHING 2271	
1- 5	*5800947500	PLATE,EARTH	
1- 6		PLATE,MECHANISM MOUNT	
1- 7	*5200222700	MAIN PCB ASSY [J,US,C,GE]	Ref. pages 23 & 27
	*5200222710	MAIN PCB ASSY [UK,A]	Ref. pages 23 & 27
	*5200222720	MAIN PCB SSSY [E]	Ref. pages 23 & 27
1- 8	*5200223800	SELECTER PCB ASSY	Ref. pages 26 & 29
1- 9	*5200223700	POWER SW PCB ASSY [J,US,C,GE]	Ref. pages 26 & 29
	*5200223710	POWER SW PCB ASSY [E,UK,A]	Ref. pages 26 & 29
1-10	⚠ 5320044600	TRANSFORMER,POWER [J]	
	⚠ 5320044700	TRANSFORMER,POWER [US,C]	
	⚠ 5320044800	TRANSFORMER,POWER [GE]	
	⚠ 5320044900	TRANSFORMER,POWER [E,UK,A]	
1-11	*5200223900	TRANS.PCB ASSY	Ref. page 29
1-12	*5200222800	TRANS.(A)PCB ASSY	Ref. page 29
1-13	*5800253701	ROD, POWER SW.	
1-14	5800948200	BUTTON,POWER	
1-15	*5800838300	SPRING,DOOR (R)	
1-16	*5800822400	PLATE,TAPE INDICA.	
1-17	*5800839402	BOTTOM PLATE	
1-18	5800603801	SPRING,CASS.PRESS.	
1-19	*5200223200	LED(A)PCB ASSY	Ref. pages 26 & 29
1-20	*5800947600	SHEET(A)	
1-21	*5800839700	HOLDER,CASSETTE	
1-22	*5200223000	NR PCB ASSY	Ref. pages 25 & 28
1-23		MAIN CHASSIS	
1-24	*5800954400	FOOT ASSY	
1-25	*5787005400	SUPPORT PCB LSR-14R	
1-26	*5200223100	METER PCB ASSY	Ref. pages 25 & 28
1-27	*5200223600	SENSOR PCB ASSY	Ref. pages 26 & 28
1-28	5800947900	BUTTON (A)	
1-29	5800948000	BUTTON (B)	
1-30	5800948100	KNOB,TIMER	
1-31	*5800947800	MASK,VR.	
1-32	5800949100	KNOB,SLIDE VR.(L)	
1-33	5800949200	KNOB,SLIDE VR.(R)	
1-34	*5200223500	SW PCB ASSY	Ref. pages 26 & 28
1-35	*5800947300	BRACKET, SW	
1-36	*5200223400	JACK PCB ASSY	Ref. pages 26 & 28
1-37	5800838200	SPRING,DOOR L	
1-38	*5200223300	LED(B)PCB ASSY	Ref. pages 26 & 29
1-39	*5800947700	SHEET(B)	
1-40	*5800949701	PANEL, FRONT ASSY	
1-41	VACANT		

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Parts marked with *require longer delivery time.

EXPLODED VIEW-1

REF. NO.	PARTS NO.	DESCREPTION	REMARKS
1-42	5800957600	CASSETTE COVER	
1-43	5800842200	KNOB,A	
1-44	*5800948400	COVER,METER	
1-45	*5800948500	FL.FILTER	
1-46	*5801004700	SPACER	
1-47	*5800999700	CUSHION	
1-48	*5801006000	INSULATING SEAT [E,UK,A]	
1-49	*5800990200	PLATE,SHIELD(B)	
1-51	*5800612400	SCREW,M3X8 BLK	
1-52	*5783613008	SCREW, C TITE M3X8	
1-53	*5783693006	SCREW,BIND S TITE M3X6	
1-54	*5783543008	SCREW,BIND P TITE M3X8	
1-55	*5783033006	SCREW,BIND S TITE M3X6	
1-56	*5783074008	SCREW,PAN S TITE M4X8	
1-57	*5783073006	SCREW,PAN S TITE M3X6	
1-58	*5783033008	SCREW,BIND S TITE M3X8	
1-59	*5783603008	SCREW,BIND P TITE M3X8	
1-60	*5783542612	SCREW,BIND P TITE M2.6X12	
1-61	*5783032606	SCREW,BIND S TITE M2.6X6	
1-62	*5786713300	CORD CLAMP	

INCLUDED ACCESORIES

REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
	*5700095600	OWNER'S MANUAL [J]	
	*5700095700	OWNER'S MANUAL [EXCEPT J]	
	*5744065500	REMOTE CONTROL UNIT RC-306	
	*5350011600	CORD,IN-OUT 1.0M	
	*5347006900	BATTEREY(SUM-3) [J]	
	*5347007000	BATTERIY(SUM-3) [EXCEPT J]	

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[A]:AUSTRALIA [GE]:GENERAL EXPORT [J]:JAPAN

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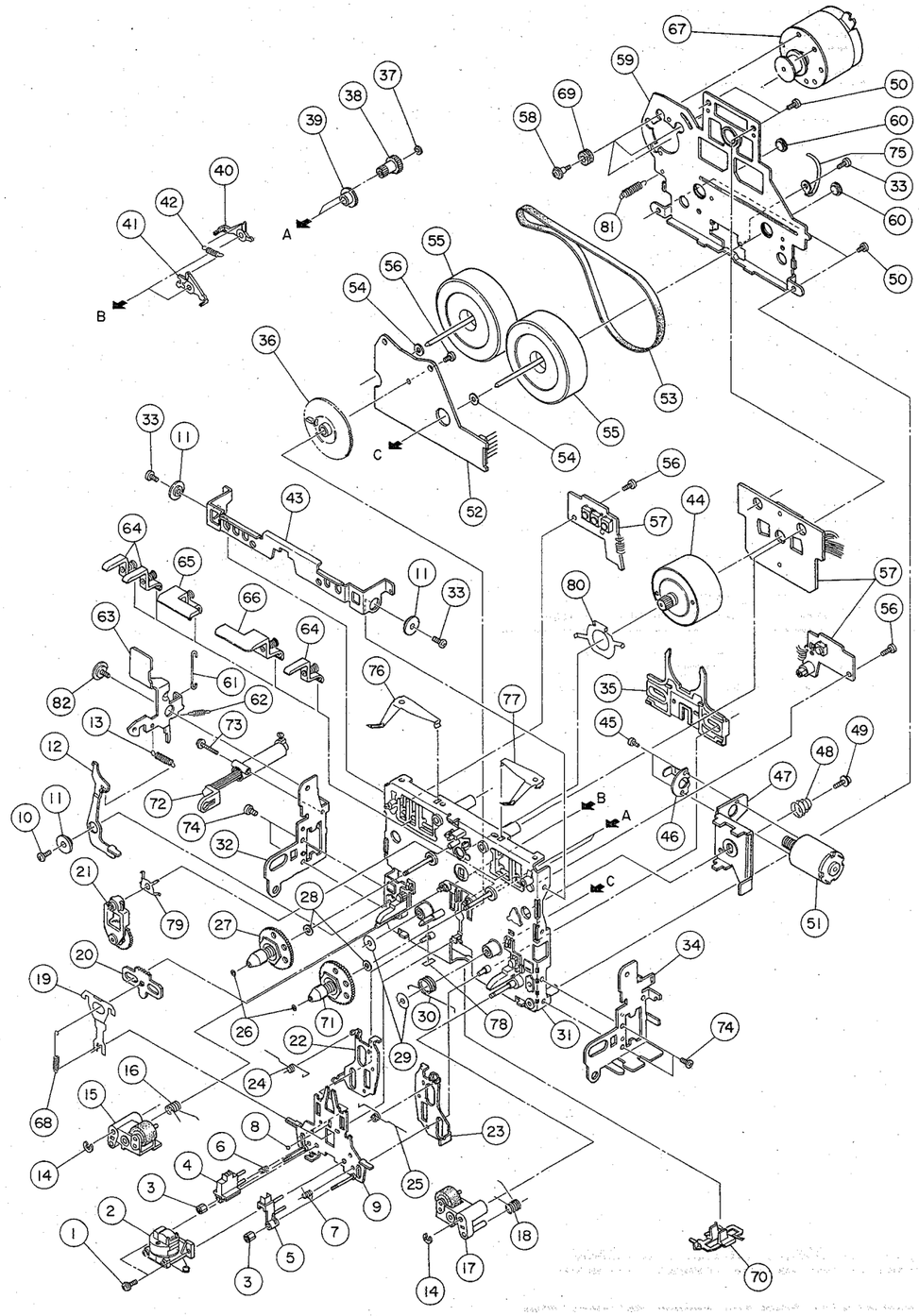
EXPLODED VIEW-2 (Deck I)



EXPLODED VIEW-2

REF. NO.	PARTS NO.	DESCREPTION	REMARKS
2- 1	*5761687900	SCREW,W/WASHER M2X5	
2- 2	5761743700	HEAD ASSY F257-126	
2- 3	*5761687700	SCREW, F LOCK FD30C-21	
2- 4	5761743900	SENSOR ASSY F258-074	
2- 5	5761687500	TAPE GIDE	
2- 6	*5761687300	SPRING, AZIMUTH(L)	
2- 7	*5761687400	SPRING, AZIMUTH(R)	
2- 8	*5761687200	STEEL BALL,1/16	
2- 9	*5761687100	HEAD PLATE ASSY	
2-10	*5761685200	SCREW, PAN M3X6 KG194-12	
2-11	*5761685100	SPASER FM296-11	
2-12	*5761684900	ARM(L),EJECT PRIVENTION	
2-13	*5761685000	SPRING, EJECT PRIVENTION	
2-14	*5761686100	E-RING KG111-19	
2-15	5761686000	PINCH ROLLER ASSY	
2-16	5761685700	SPRING(L), PINCH ROLLER	
2-17	5761685900	PINCH ROLLER ASSY	
2-18	5761685800	SPRING(R), PINCH ROLLER	
2-19	5761686900	SPRING,HOLDER	
2-20	*5761686800	PLATE,C/R SLIDE	
2-21	5761686700	IDLER ASSY	
2-22	*5761685300	BASE(L), SLIDE FC34R-11	
2-23	*5761685400	BASE(R), SLIDE FC35D-11	
2-24	*5761685500	SPRING L,SB	
2-25	*5761685600	SPRING R,SB	
2-26	*5761686500	WASHER UJ12B-11	
2-27	5761686300	REEL TABLE ASSY	
2-28	*5761686200	POLY. SLIDER UJ12P-11	
2-29	*5761689700	SHEET,WASHER OIL FJ141-11	
2-30	*5761689600	SPRING,H.B.	
2-31	*5761684700	CHASSIES F112-069	
2-32		BRACKET DAMPER(L)FC33L-14	
2-33	*5761690800	SCREW, PAN M3X5	
2-34		BRACKET DAMPER(R)FC33K-14	
2-35	*5761688000	PLATE, SLIDE FD27K-21	
2-36	5761688200	GEAR ASSY	
2-37	*5761688400	WASER FJ123-14	
2-38	5761688300	GEAR,WARM	
2-39	5761688100	GEAR,IDLER	
2-40	*5761691000	LEVER L,BRAKE	
2-41	*5761691100	LEVER R,BRAKE	
2-42	*5761691200	SPRING,BRAKE FK20R-12	
2-43	*5761691500	DETECTER ARM FC33N-21	
2-44	5761744100	MOTOR ASSY F064-257	
2-45	*5761688800	SCREW, M2X3.5 FG141-20	
2-46	*5761688600	BRACKET,THRUST FC33M-22	
2-47	*5761688500	BRACKET,ASSISTANT MOTOR	
2-48	*5761688900	SPRING, BRACKET FK20M-14	
2-49	*5761689000	SCREW TP UG13V-11	
2-50	*5761690900	SCREW,WAVE 2.6X8 UG12H-14	
2-51	5761688700	MOTOR	
2-52	*5761689100	PCB ASSY	
2-53	5761689400	BELT,MAIN	
2-54	*5761689200	POLYSLIDER FJ111-30	
2-55	5761689300	FLYWHEEL ASSY,CAPSTAN	

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EXPLODED VIEW-2

REF. NO.	PARTS NO.	DESCREPTION	REMARKS
2-56	*5761689500	SCREW,WAVE 2X6	
2-57	*5761744200	CONNECTOR ASSY F067-074	
2-58	*5761690500	SCREW,MOTOR UG12W-12	
2-59		MOTOR,BKT	
2-60	*5761690600	SCREW,WHEEL BRAC.FM177-22	
2-61	*5761691700	CONNECT ROD FK20N-11	
2-62	*5761692500	SPRING,EJECT ARM FK20C-13	
2-63	*5761692400	EJECT ARM (L) FC33W-21	
2-64	5761691300	SENSOR ASSY,REC	
2-65	5761693100	SENSOR ASSY,METAL	
2-66	5761691400	SENSOR ASSY,CASSETTE	
2-67	5761690400	MOTOR	
2-68	*5761687000	SPRING,SLIDE FK20T-15	
2-69	*5761690300	CUSHION,MOTOR FJ115-12	
2-70	*5761692000	LEAD HOLDER FD29V-21	
2-71	5761686400	REEL TABLE ASSY,T.	
2-72	5761740700	DAMPER ASSY	
2-73	*5761690100	SCREW,TAP.TITE UG12R-11	
2-74	*5761692300	SCREW,TAP.TITE KG194-46	
2-75	*5761690700	LUG UH11T-11	
2-76	*5761691800	PLATE,CASSETTE (L)	
2-77	*5761691900	PLATE,CASSETTE (R)	
2-78	*5761684800	PLATE,REFRECTION UT11R-11	
2-79	*5761686600	LEAF SPRING FC39P-22	
2-80	*5761689800	PLATE,EARTH FC35U-21	
2-82	*5761744300	SCREW UG14M-11	

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[A]:AUSTRALIA [GE]:GENERAL EXPORT [J]:JAPAN

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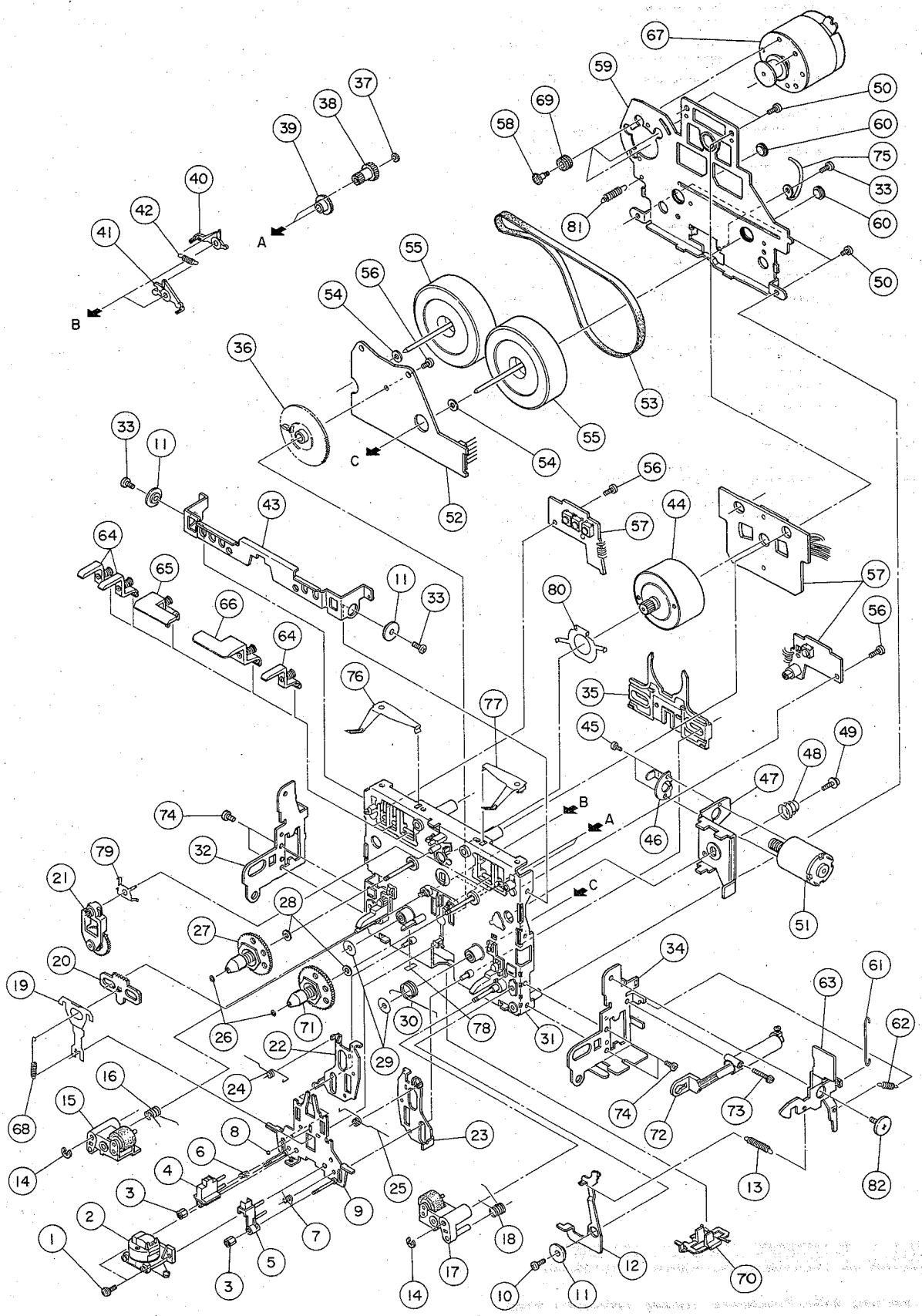
EXPLODED VIEW-3 (Deck II)



EXPLODED VIEW-3

REF. NO.	PARTS NO.	DESCREPTION	REMARKS
3- 1	*5761687900	SCREW M2X5 FG114-23	
3- 2	5761743800	ROTARY HEAD ASSY F257-127	
3- 3	*5761687700	NUT,ADJUSTING FD30C-21	
3- 4	5761744000	SENSER ASSY F258-075	
3- 5	5761687500	GUIDE,TAPE	
3- 6	*5761687300	SPRING L,ADJUST.	
3- 7	*5761687400	SPRING R,ADJUST.	
3- 8	*5761687200	STEEL BALL,1/16	
3- 9	*5761687100	PLATE,HEAD	
3-10	*5761685200	SCREW,PAN M3X6 KG194-12	
3-11	*5761685100	SPACER FM296-11	
3-12	*5761692600	ARM(R),EJECT PROTECTION	
3-13	*5761685000	SPRING,EJECT PROTECTION	
3-14	*5761686100	E-RING KG111-19	
3-15	5761686000	PINCH ROLLER ASSY	
3-16	5761685700	SPRING(L),PINCH FK21A-11	
3-17	5761685900	PINCH ROLLER ASSY	
3-18	5761685800	SPRING(R),PINCH FK20Y-11	
3-19	*5761686900	SPRING,HOLDER	
3-20	*5761686800	PLATE,C/R SLIDE	
3-21	5761686700	IDLER ASSY	
3-22	*5761685300	BASE(L),SLIDE FC34R-11	
3-23	*5761685400	BASE(R),SLIDE FC35D-11	
3-24	*5761685500	SPRING L,SB	
3-25	*5761685600	SPRING R,SB	
3-26	*5761686500	WASHER UJ12B-11	
3-27	5761686300	REEL TABLE ASSY	
3-28	*5761686200	POLYSLIDER UJ12P-11	
3-29	*5761689700	SHEET,WASSHA OIL FJ141-11	
3-30	*5761689600	SPRING,H.B.	
3-31	*5761684700	CHASSIS F112-069	
3-32		BRACKET L,DAMPER FC33L-14	
3-33	*5761690800	SCREW, PAN M3X5 KG189-11	
3-34		BRACKET R,DAMPER FC33K-14	
3-35	*5761688000	PLATE,SLIDE FD27K-21	
3-36	5761688200	GEAR ASSY	
3-37	*5761688400	WASHER FJ123-14	
3-38	5761688300	GEAR,WARM	
3-39	5761688100	GEAR,IDLER	
3-40	*5761691000	LEVER L,BRAKE	
3-41	*5761691100	LEVER R,BRAKE	
3-42	*5761691200	SPRING,BRAKE FK20R-12	
3-43	*5761691500	PLATE SEARCH FC33N-21	
3-44	5761744100	MOTOR ASSY F064-257	
3-45	*5761688800	SCREW M2X3.5 FG141-20	
3-46	*5761688600	BRACKET THRUST FC33M-22	
3-47	*5761688500	BRACKET,ASSISTANT MOTOR	
3-48	*5761688900	SPRING,BRACKET FK20M-14	
3-49	*5761689000	SCREW,TP UG13V-11	
3-50	*5761690900	SCREW,WAVE 2.6X8 UG12H-14	
3-51	5761688700	MOTOR	
3-52	*5761689100	PCB ASSY	
3-53	5761689400	BELT,MAIN	
3-54	*5761689200	POLYSLIDER FJ111-30	
3-55	5761689300	FLYWHEEL ASSY,CAPSTAN	

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[A]:AUSTRALIA [GE]:GENERAL EXPORT [J]:JAPAN

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EXPLODED VIEW-3

REF. NO.	PARTS NO.	DESCREPTION	REMARKS
3-56	*5761689500	SCREW,WAVE 2X6 UG12H-11	
3-57	*5761744200	CONNECTOR ASSY	
3-58	*5761690500	SCREW,MOTOR UG12W-12	
3-59		MOTOR,BKT	
3-60	*5761690600	SCREW,WHEEL BRACKET	
3-61	*5761691700	ROD,CONNECT FK20N-11	
3-62	*5761692500	ARM SPRING,EJECT	
3-63	*5761693200	ARM(R),EJECT FC34L-13	
3-64	5761691300	SENSOR ASSY,REC	
3-65	5761693100	SENSOR ASSY,METAL	
3-66	5761691400	SENSOR ASSY,CASSETTE	
3-67	5761693000	MOTOR	
3-68	*5761687000	SLIDE SPRING,CR FK20T-15	
3-69	*5761690300	CUSHION,MOTOR FJ115-12	
3-70	*5761692000	HOLDER,LEAD FD29V-21	
3-71	5761686400	REEL TABLE ASSY,T.	
3-72	5761740700	DAMPER ASSY	
3-73	*5761690100	SCREW,TAPP.TITE UG12R-11	
3-74	*5761692300	SCREW,TAPP.TITE KG194-46	
3-75	*5761690700	LUG UH11T-11	
3-76	*5761691800	PLATE,CASSETTE L	
3-77	*5761691900	PLATE,CASSETTE R	
3-78	*5761684800	PLATE,REFRECTION UT11R-11	
3-79	*5761686600	SPRING,CONTROL FC39P-22	
3-80	*5761689800	PLATE,EARTH FC35U-21	
3-81	*5761717100	SPRING,EARTH FK21T-11	
3-82	*5761744300	SCREW UG14M-11	

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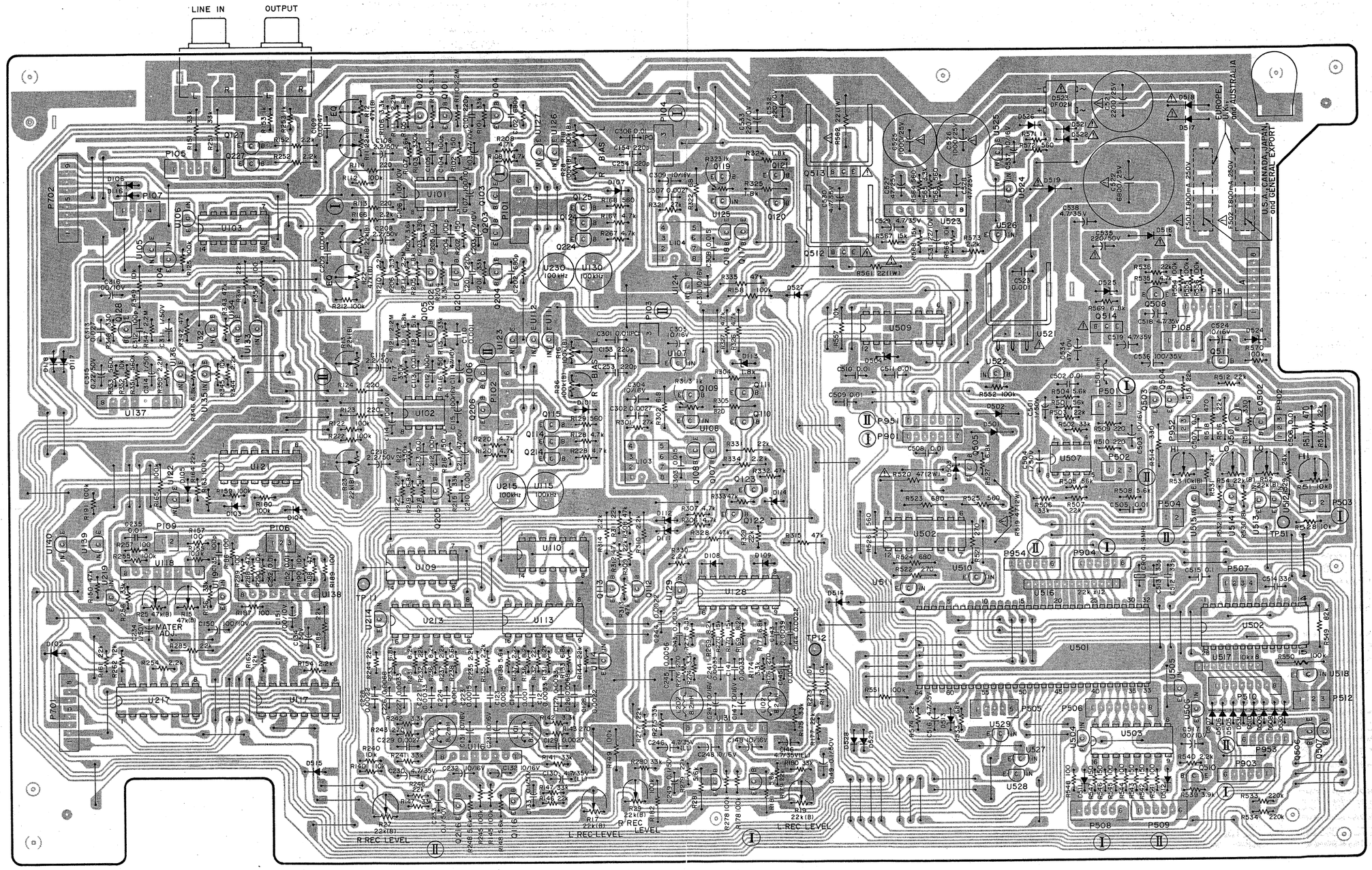
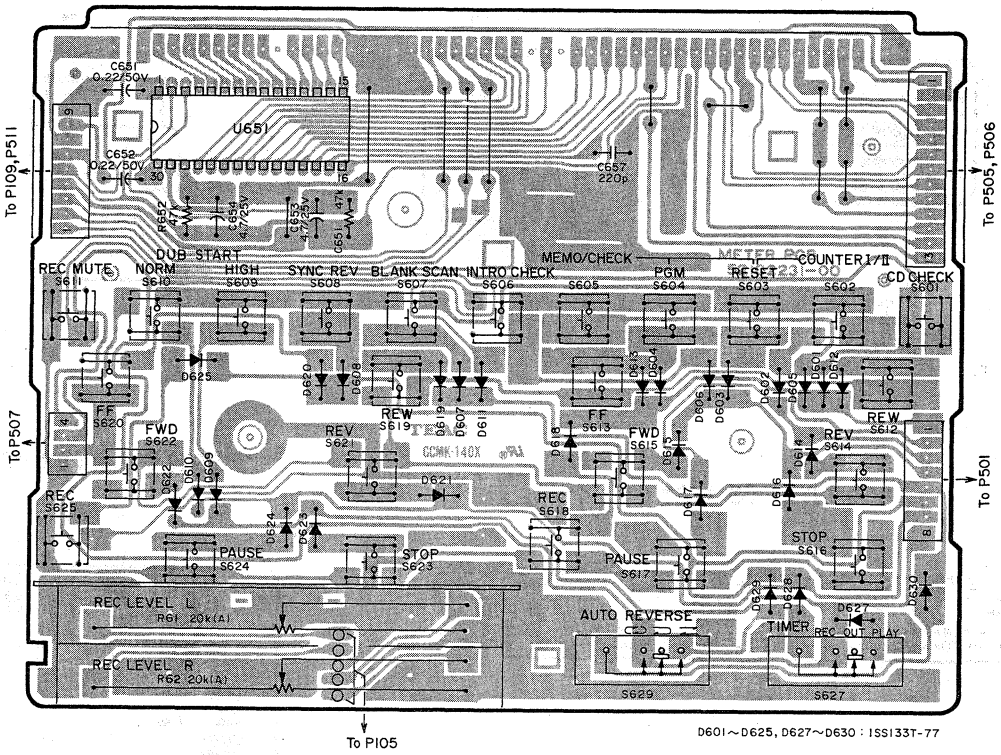
7 PC BOARDS AND PARTS LIST

基板図とパーツ・リスト

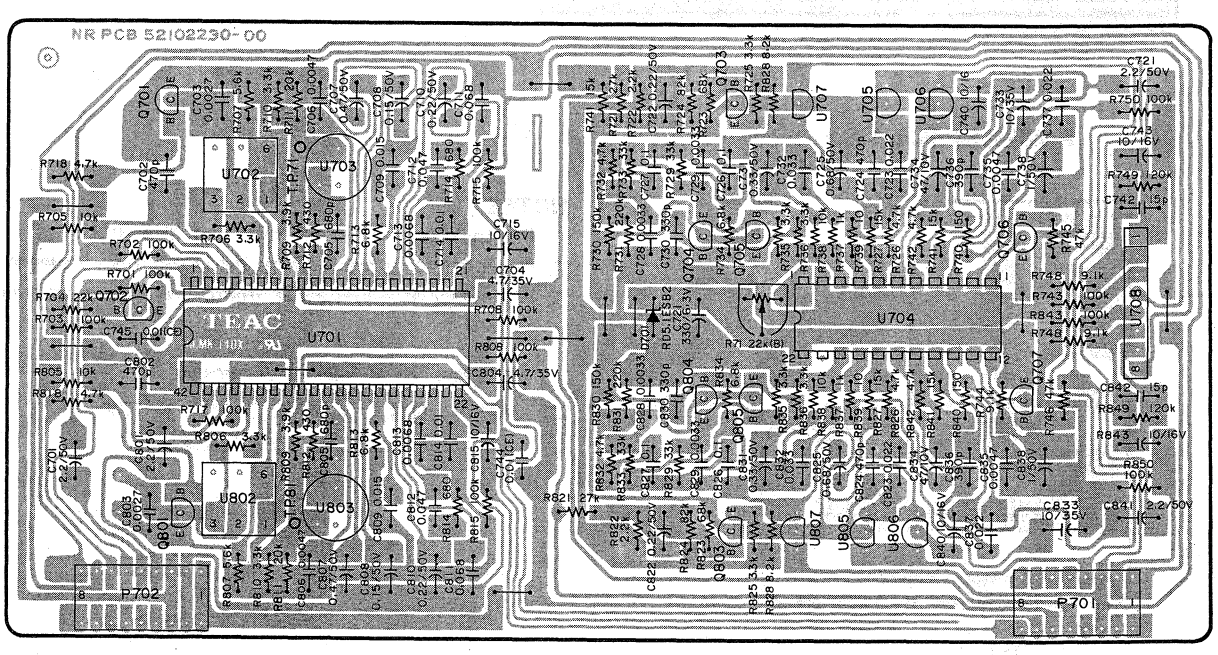
MAIN PCB ASSY



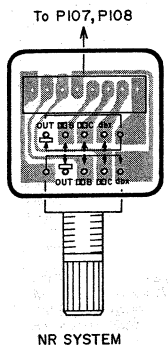
METER PCB ASSY



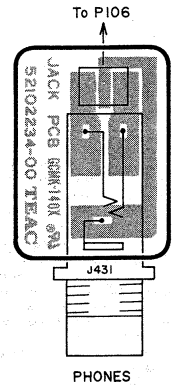
NR PCB ASSY



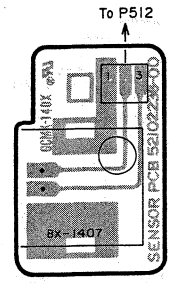
SW PCB ASSY



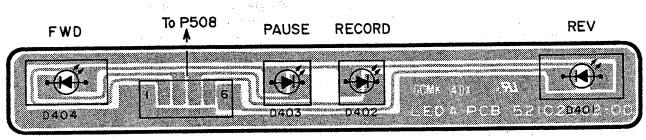
JACK PCB ASSY

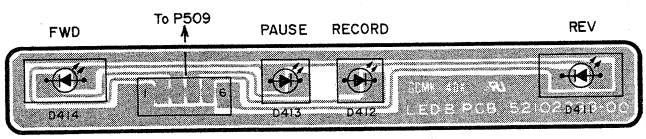


SENSOR PCB ASSY

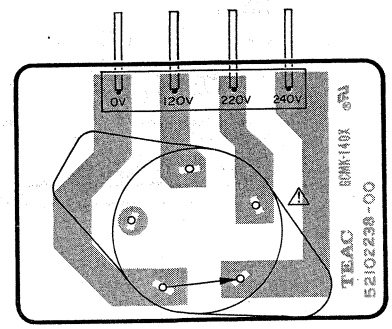


LED A PCB ASSY

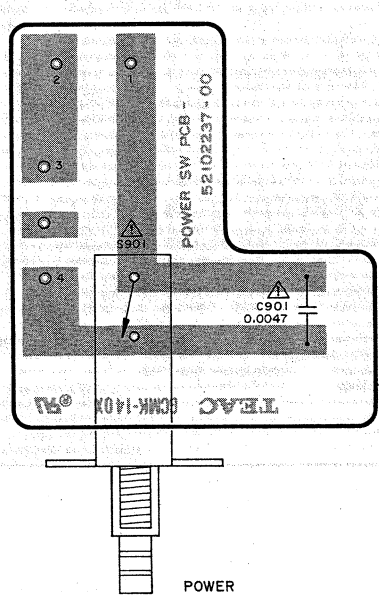




SELECTOR PCB ASSY



POWER SW PCB ASSY



NOTES

1. PC boards are shown viewed from foil side.
2. Resistor values are in ohms (k=kilo-ohms M=megohms).
3. All capacitor values are in microfarads (p=picofarads).

注

1. 基板図はパターン面が示されています。
2. 抵抗の単位はΩ(k=kΩ, M=MΩ)です.
3. コンデンサの単位はμF(pF)です.

MAIN PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*5200222700	MAIN PCB ASSY [J,US,C,GE]
	*5200222710	MAIN PCB ASSY [UK,A]
	*5200222720	MAIN PCB ASSY [E]
	*5210222700	MAIN PCB
	*5210225400	SEILED PCB
	5330509600	JACK,4P
	5555590000	PLATE.PCB EARTH;A
	5544750000	PIN,CONBINATION
	5800990100	HEAT SINK
	5783033008	SCREW,BIND S TITE M3X8
	5332015800	HOLDER,FUSE PCB
C105C205	5263166723	C.,METAL 0.010UF 50V J VT
C113C213	5263166723	C.,METAL 0.010UF 50V J VT
C303	5263166923	C.,METAL 0.015UF/50V J VT
C308	5263166923	C.,METAL 0.015UF/50V J VT
CR01	5292806100	FILTER,CERAMIC 4.19M
D101-109	5224015020	DIODE,ISS133T-77
D111-114	5224586521	DIODE,ZENER RD7.5ESB2 FT
D116-118	5224015020	DIODE,ISS133T-77
D501D502	5224016720	DIODE, ISR35-200A FT
D503	5224587321	DIODE,ZENER RD9.1ESB2 FT
D504	5224585321	DIODE,ZENER RD5.6ESB2 FT
D505-512	5224015020	DIODE,ISS133T-77
D513	5224587321	DIODE,ZENER RD9.1ESB2 FT
D514-515	5224015020	DIODE,ISS133T-77
D516-519	⚠5224016720	DIODE, ISR35-200A FT
D521	⚠5224015020	DIODE,ISS133T-77
D522	⚠5224015020	DIODE,ISS133T-77
D523	5228010300	SILICON STACK,DF02M
D524	5224586121	DIODE,ZENER RD6.8ESB2 FT
D525	5224591921	DIODE,ZENER RD27ESB2 FT
D526-531	5224015020	DIODE,ISS133T-77
F501F502	⚠5142186000	FUSE,MINI.800MA (T)
L101L201	5286008700	COIL,CHOKE 8.2MH
L102L202	5286008700	COIL,CHOKE 8.2MH
L103	5286025400	COIL,OSC
L104	5286025400	COIL,OSC
L501	5286021020	COIL,CHOKE 1000UH M VR
P101-102	5336245600	PLUG,CONNECTOR B06B-XH-A
P103-104	5336245300	PLUG,CONNECTOR B03B-XH-A
P105	5336249600	PLUG,CONN.WHT B06B-PH-K-S
P106	5336249300	PLUG,CONN.WHT B03B-PH-K-S
P107	5336249400	PLUG,CONN.WHT B04B-PH-K-S
P108	5336251400	PLUG,CONN.RED B04B-PH-K-R
P109	5336249200	PLUG,CONN.WHT B02B-PH-K-S
P501	5336245300	PLUG,CONN. B03B-XH-A
P502	5336245300	PLUG,CONNECTOR B03B-XH-A
P503-504	5336245200	PLUG,CONNECTOR B02B-XH-A
P506	5336249800	PLUG,CONN.WHT B08B-PH-K-S
P507	5336249400	PLUG,CONN.WHT B04B-PH-K-S
P508	5336249600	PLUG,CONN.WHT B06B-PH-K-S
P509	5336251600	PLUG,CONN.RED B06B-PH-K-R
P510	5336251800	PLUG,CONN.RED B08B-PH-K-R
P511	5336249700	PLUG,CONN.WHT B07B-PH-K-S
P512	5336249300	PLUG,CONN.WHT B03B-PH-K-S

MAIN PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
P701	5336279800	PLUG,CONN. 8P IL-SDA-P
P702	5336279900	PLUG,CONN. 9P IL-SDA-P
Q101Q201	5232007920	FET 2SJ-40(D)
Q102Q202	5232007920	FET 2SJ-40(D)
Q103Q203	5230780920	TRANSISTOR 2SC2603F
Q104Q204	5230780920	TRANSISTOR 2SC2603F
Q105Q205	5232007920	FET 2SJ-40(D)
Q106Q206	5230780920	TRANSISTOR 2SC2603F
Q107Q113	5230780920	TRANSISTOR 2SC2603F
Q114Q214	5230780920	TRANSISTOR 2SC2603F
Q115	5230780920	TRANSISTOR 2SC2603F
Q116Q216	5231762020	TRANSISTOR 2SD1450S/T
Q117-120	5230780920	TRANSISTOR 2SC2603F
Q121-123	5230780920	TRANSISTOR 2SC2603F
Q124Q224	5230780920	TRANSISTOR 2SC2603F
Q125	5230780920	TRANSISTOR 2SC2603F
Q126Q226	5231762020	TRANSISTOR 2SD1450S/T
Q127Q227	5231762020	TRANSISTOR 2SD1450S/T
Q128	5230780920	TRANSISTOR 2SC2603F
Q501-507	5230780920	TRANSISTOR 2SC2603F
Q508	5145082000	TRANSISTOR 2SC-2060Q
Q510	5145082000	TRANSISTOR 2SC-2060Q
Q511	5230781000	TRANSISTOR 2SC1741S
Q512	⚠5231762400	TRANSISTOR 2SD1506P-Q
Q513-514	⚠5230509600	TRANSISTOR 2SB1065P-Q
R011R021	5280021500	R.,TRIMMER 22KB
R012R022	5280021700	R.,TRIMMER 47KB
R013R023	5280021500	R.,TRIMMER 22KB
R015R025	5280021700	R.,TRIMMER 47KB
R016R026	5280021900	R.,TRIMMER 100KB
R017R027	5280021500	R.,TRIMMER 22KB
R018R028	5280021900	R.,TRIMMER 100KB
R019R029	5280021500	R.,TRIMMER 22KB
R051R053	5280021300	R.,TRIMMER 10KB
R052R054	5280021500	R.,TRIMMER 22KB
R519-520	⚠5241284510	R.,NONFLAMMABLE 2W 470HM J FF
R561-562	⚠5241273710	R.,NONFLAMMABLE 1W 220HM J FF
U101-102	5220426900	IC.,M5220P
U103	5220041100	IC.,BU4066B
U104	5232254820	TRANSISTOR,DIGITAL DTA124ES
U105-107	5232255720	TRANSISTOR,DIGITAL DTC124ES
U108	5232253020	TRANSISTOR,DIGITAL DTA143ES
U109	5220055600	IC.,DIGITAL BU4081B
U110	5220055400	IC.,DIGITAL BU4001B
U111	5232254820	TRANSISTOR,DIGITAL DTA124ES
U112	5232255720	TRANSISTOR,DIGITAL DTC124ES
U113U213	5232250900	TRANSISTOR ARRAY BA6251
U114U214	5232255720	TRANSISTOR,DIGITAL DTC124ES
U115U215	5292805900	FILTER,LOW PASS 100KHZ
U116	5220416200	IC.,M5218L
U117U217	5220055500	TRANSISTOR,DIGITAL BU4053B
U118U217	5220416200	IC.,M5218L
U119U219	5232255720	TRANSISTOR,DIGITAL DTC124ES
U121	5220040100	IC.,M4049UBP
U122	5232255720	TRANSISTOR,DIGITAL DTC124ES

[US]:U.S.A. [E]:EUROPE [UK]:U.K. [C]:CANADA
[A]:AUSTRALIA [GE]:GENERAL EXPORT [J]:JAPAN

Parts marked with *require longer delivery time.

MAIN PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
U123-124	5232255720	TRANSISTOR,DIGITAL DTC124ES
U125	5232253020	TRANSISTOR,DIGITAL DTA143ES
U126	5232254820	TRANSISTOR,DIGITAL DTA124ES
U127	5232255720	TRANSISTOR,DIGITAL DTC124ES
U128	5232250900	TRANSISTOR ARRAY BA6251
U129	5232255720	TRANSISTOR,DIGITAL DTC124ES
U130U230	5292805900	FILTER,LOW PASS 100KHZ
U131	5220416200	IC.,M5218L
U132-136	5232255720	TRANSISTOR,DIGITAL DTC124ES
U137	5220426200	IC.,M51143AL
U138	5220416200	IC.,M5218L
U139	5232254820	TRANSISTOR,DIGITAL DTA124ES
U140	5232255720	TRANSISTOR,DIGITAL DTC124ES
U501	5220810200	IC., UPD7519-HCW227
U502	5220810300	IC., UPD7507S-247
U503	6048105000	IC.,M54519P
U504-505	5232255720	TRANSISTOR,DIGITAL DTC124ES
U506	5232256820	TRANSISTOR,DIGITAL DTB143ES
U507	5220426300	IC.,BA6993
U508-509	5220430200	IC.,LB1649
U510-513	5232255720	TRANSISTOR,DIGITAL DTC124ES
U514-515	5232256620	TRANSISTOR,DIGITAL DTA144TS
U516	5242117600	R.,ARRAY RYLS12J223
U517	5242119100	R.,ARRAY RYLS8J103
U518	5232255720	TRANSISTOR,DIGITAL DTC124ES
U521	⚠5220430300	IC.,L78MR05
U522	5232255720	TRANSISTOR,DIGITAL DTC124ES
U523	5220425800	IC.,M5230LA
U524-525	5232255720	TRANSISTOR,DIGITAL DTC124ES
U526	5232256620	TRANSISTOR,DIGITAL DTA144TS
U527-529	5232254820	TRANSISTOR,DIGITAL DTA124ES

METER PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*5200223100	METER PCB ASSY
	*5210223100	METER PCB
	5347006300	FLUORESCENT LAMP
	5800949000	HOLDER,METER
	5800947400	PLATE,SHIELD
	5800985700	CASE,SHIELD
C657	5172216000	C.,CERAMIC 220PF/50V T
D601-625	5224015020	DIODE,1SS133T-77
D627-630	5224015020	DIODE,1SS133T-77
R601R602	5284012700	VR.,SLIDE 20KA
S601-611	5302102800	SW.,TACT B3F-1050
S612-625	5302103200	SW.,TACT KHH10910
S627S629	5300914100	SW.,SLIDE 1-3 JSA1320-
U651	5220041000	IC.,HA12067NT

NR PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*5200223000	NR PCB ASSY
	*5210223000	NR PCB
D701	5224584921	DIODE,ZENER RD5.1ESB2 FT
J701	5336281800	SOCKET,CONN. 8P IL-SDA-S
J702	5336281900	SOCKET,CONN. 9P IL-SDA-S
Q701Q801	5230780920	TRANSISTOR 2SC2603F
Q702	5230780920	TRANSISTOR 2SC2603F
Q703Q803	5230780920	TRANSISTOR 2SC2603F
Q704Q804	5230780920	TRANSISTOR 2SC2603F
Q705Q805	5230780920	TRANSISTOR 2SC2603F
Q706-707	5230018920	TRANSISTOR 2SA1115F
R071	5280020900	R.,TRIMMER 2.2KB
U701	5220427000	IC.,CX20187,
U702U802	5292806800	FILTER,LOWPASS 19KHZ
U703U803	5292806000	FILTER,L.P 19.8KHZ
U704	5220423100	IC.,AN6291,
U705U805	5232256720	TRANSISTOR,DIGITAL DTC124TS
U706U806	5232256720	TRANSISTOR,DIGITAL DTC124TS
U707U807	5232256720	TRANSISTOR,DIGITAL DTC124TS
U708	5220416200	IC.,M5218L,

SW PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*5200223500	SW PCB ASSY
	*5210223500	SW PCB
	5301205500	SW.,ROTARY SRBM14

JACK PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*5200223400	JACK PCB ASSY
	*5210223400	JACK PCB
J431	5330013800	JACK FJ332NB-Z

SENSOR PCB ASSYY

REF. NO.	PARTS NO.	DESCREPTION
	*5200223600	SENSOR PCB ASSY
	*5210223600	SENSOR PCB
	5292208200	MODULE,REMO. RCV BX-1407

[US]:U.S.A. [E]:EUROPE [UK]:U.K. [C]:CANADA
[A]:AUSTRALIA [GE]:GENERAL EXPORT [J]:JAPAN

Parts marked with *require longer delivery time.

LED(A)PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*5200223200	LED(A)PCB ASSY
	*5210223200	LED(A)PCB
D401	5225016100	LED,LD-001MG GREEN
D402	5225015500	LED,LD-101VR RED
D403	5225015500	LED,LD-101VR RED
D404	5225016100	LED,LD-001MG GREEN

LED(B)PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*5200223300	LED(B)PCB ASSY
	*5210223300	LED(B)PCB
D411	5225016100	LED,LD-001MG GREEN
D412	5225015500	LED,LD-101VR RED
D413	5225015500	LED,LD-101VR RED
D414	5225016100	LED,LD-001MG GREEN

SELECTER PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*5200223800	SELECTER PCB ASSY
	*5210223800	SELECTER PCB
S911	⚠ 5332016300	SELECTOR,VOLTAGE FS907BB

POWER SW PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*5200223700	POWER SW PCB ASSY [J,US,C,GE]
	*5200223710	POWER SW PCB ASSY [E,UK,A]
	*5210223700	POWER SW PCB
	5730007500	COVER,CONDENCER SB-1417
	5327009200	TERMINAL 2P (P=10)
C901	⚠ 5267703800	SPARK KILLER,4700PF400V M
S901	⚠ 5300046200	SW.,PUSH 1-1 SDDLD1

TRANS.(A)PCB ASSY (PC Board Omitted)

REF. NO.	PARTS NO.	DESCREPTION
	*5200222800	TRANS.(A)PCB ASSY
	*5210222800	TRANS.(A)PCB

TRANS.PCB ASSY (PC Board Omitted)

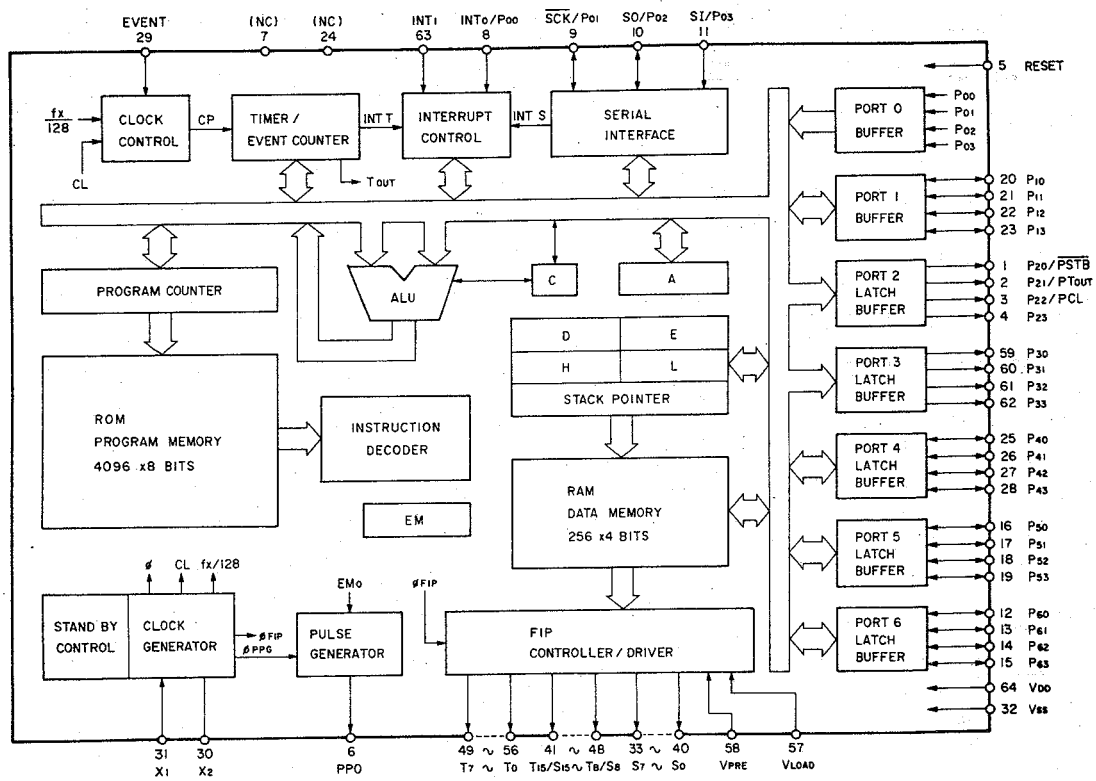
REF. NO.	PARTS NO.	DESCREPTION
	*5200223900	TRANS.PCB ASSY
	*5210223900	TRANS.PCB

US]:U.S.A. [E]:EUROPE [UK]:U.K. [C]:CANADA
A]:AUSTRALIA [GE]:GENERAL EXPORT [J]:JAPAN

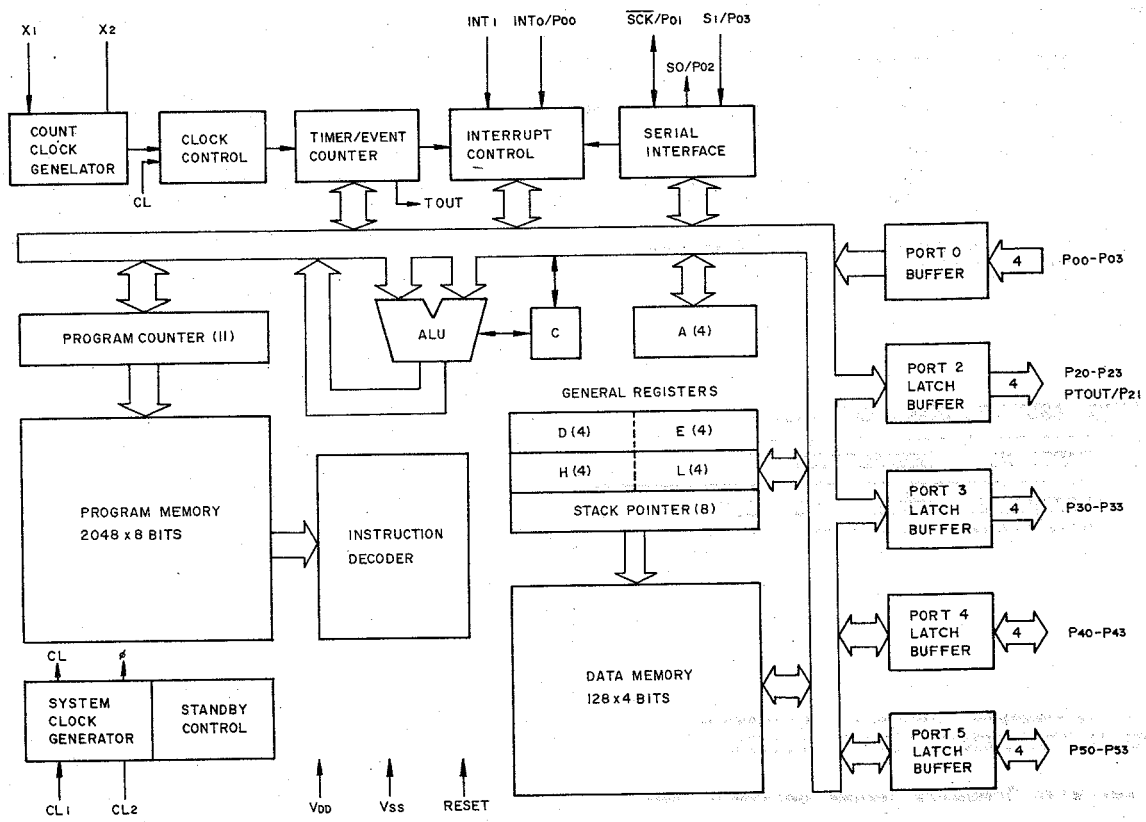
arts marked with *require longer delivery time.

IC BLOCK DIAGRAM

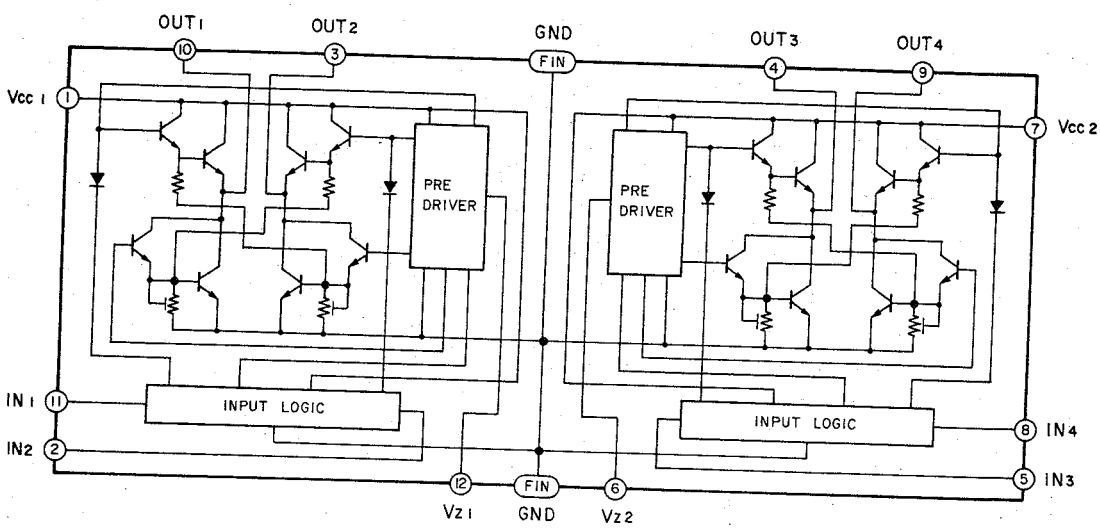
μPD7519-HCW227

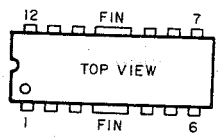


μPD7507S-247



LB1649

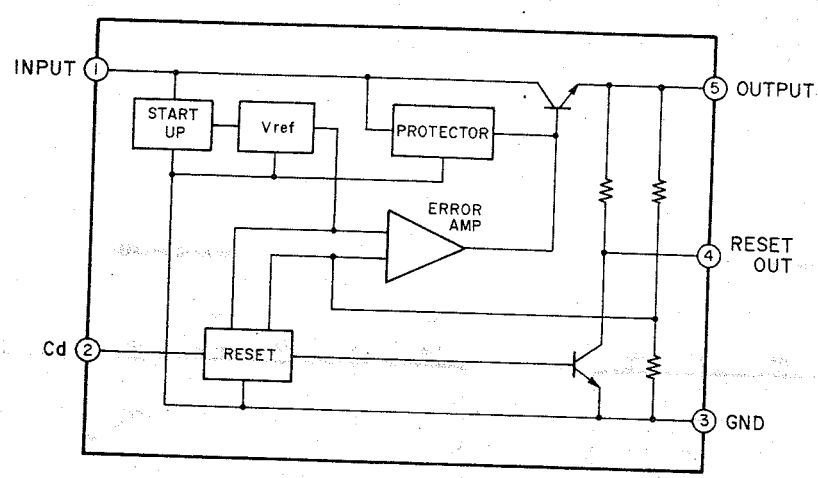


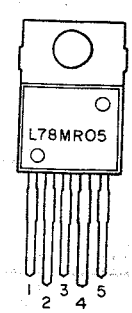


IN1	IN2	OUT1	OUT2
0	0	L	L
1	0	H	L
0	1	L	H
1	1	L	L

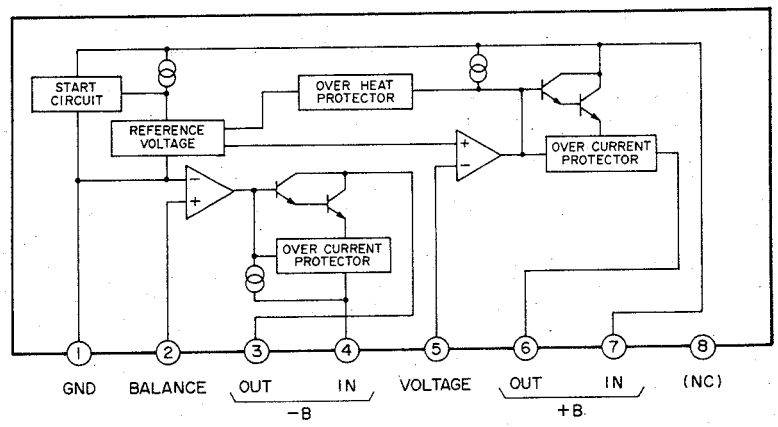
IN3	IN4	OUT3	OUT4
0	0	L	L
1	0	H	L
0	1	L	H
1	1	L	L

L78MR05

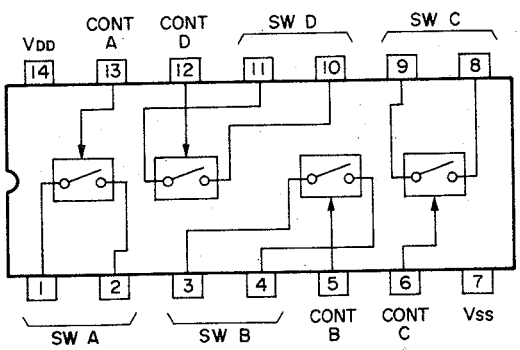




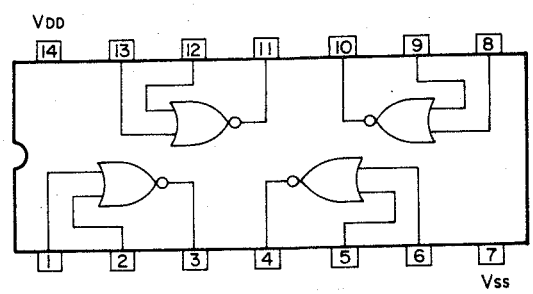
M5230L



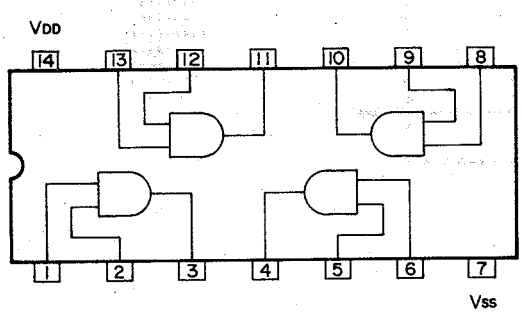
M4066BP



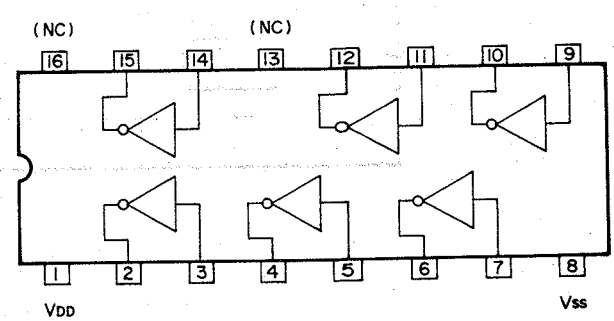
M4001BP



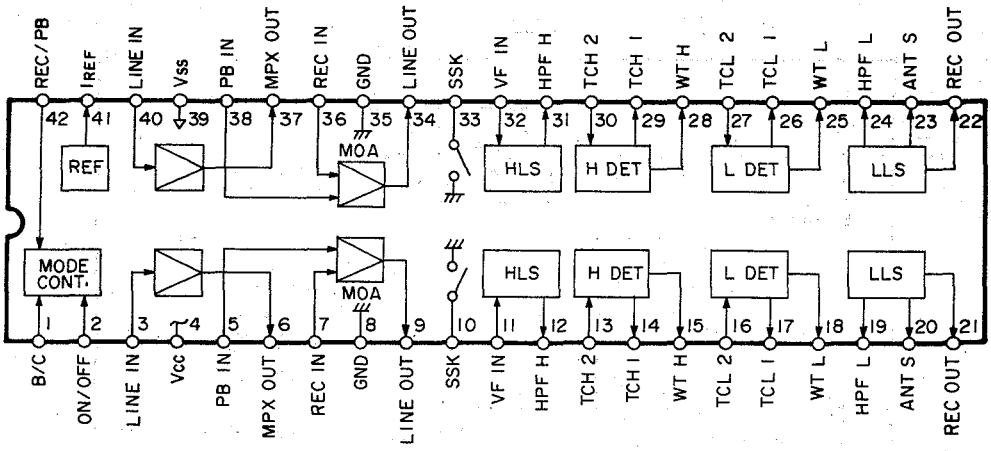
M4081BP



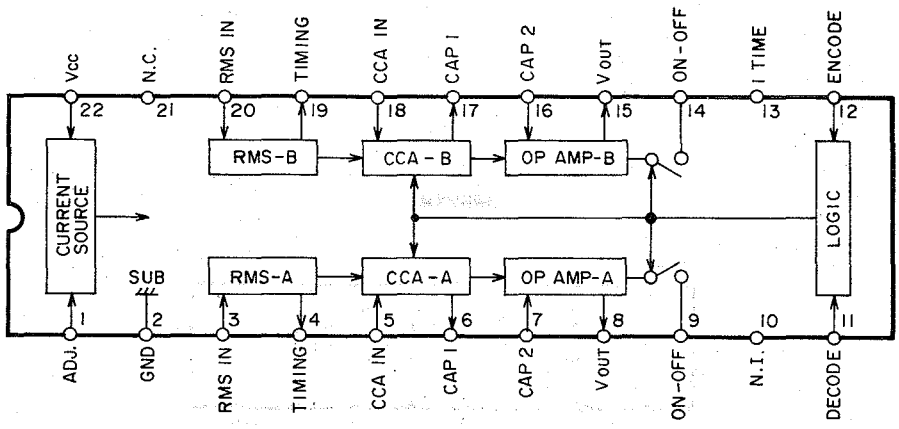
M4049UBP



CX20187



AN6291



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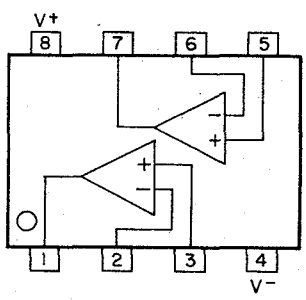
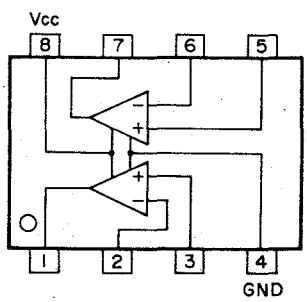
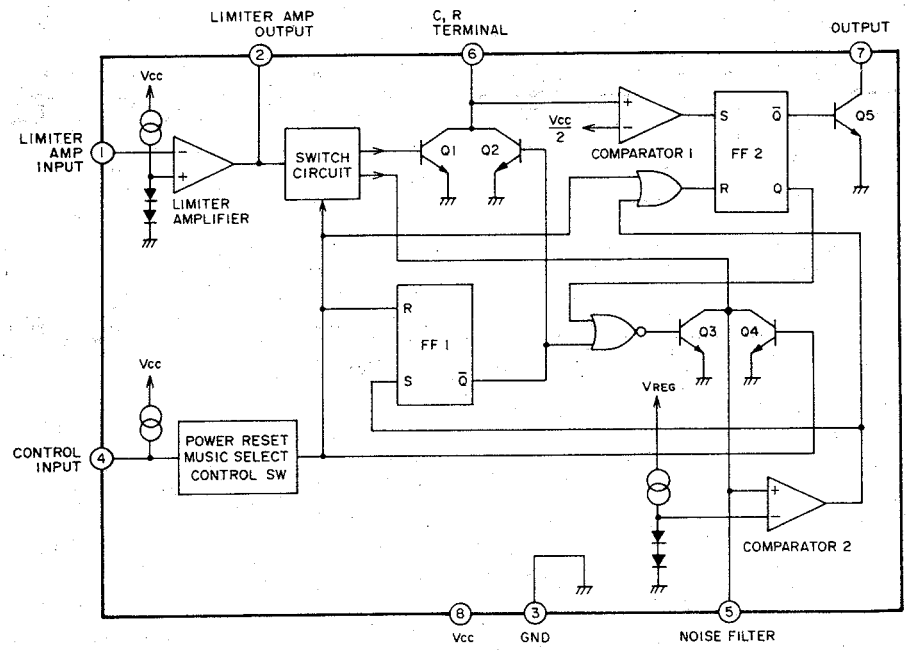


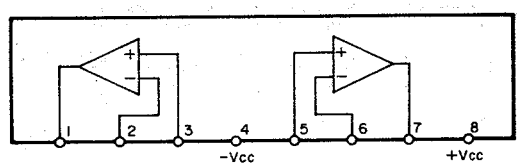
BA6993



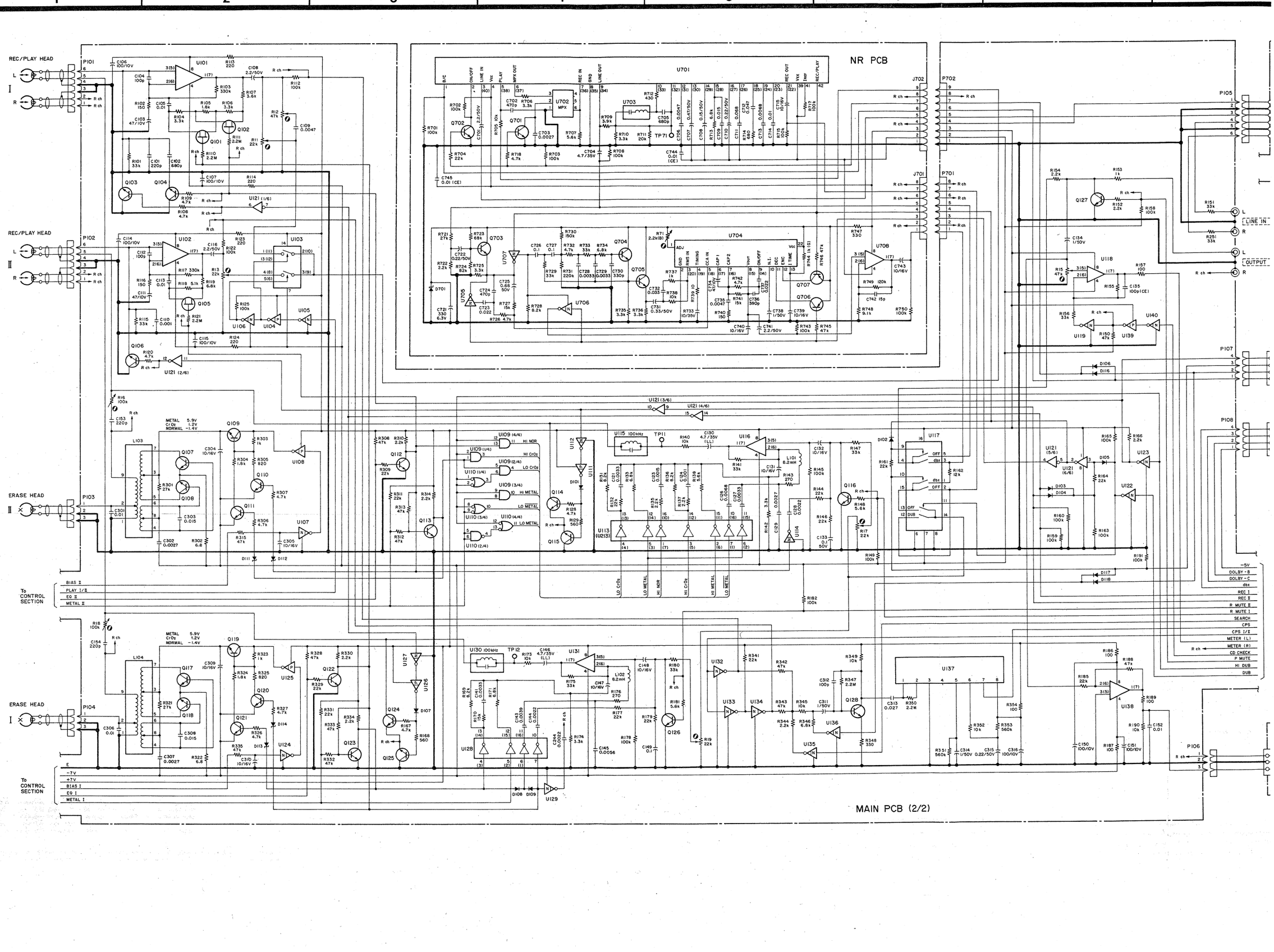
M51143AL

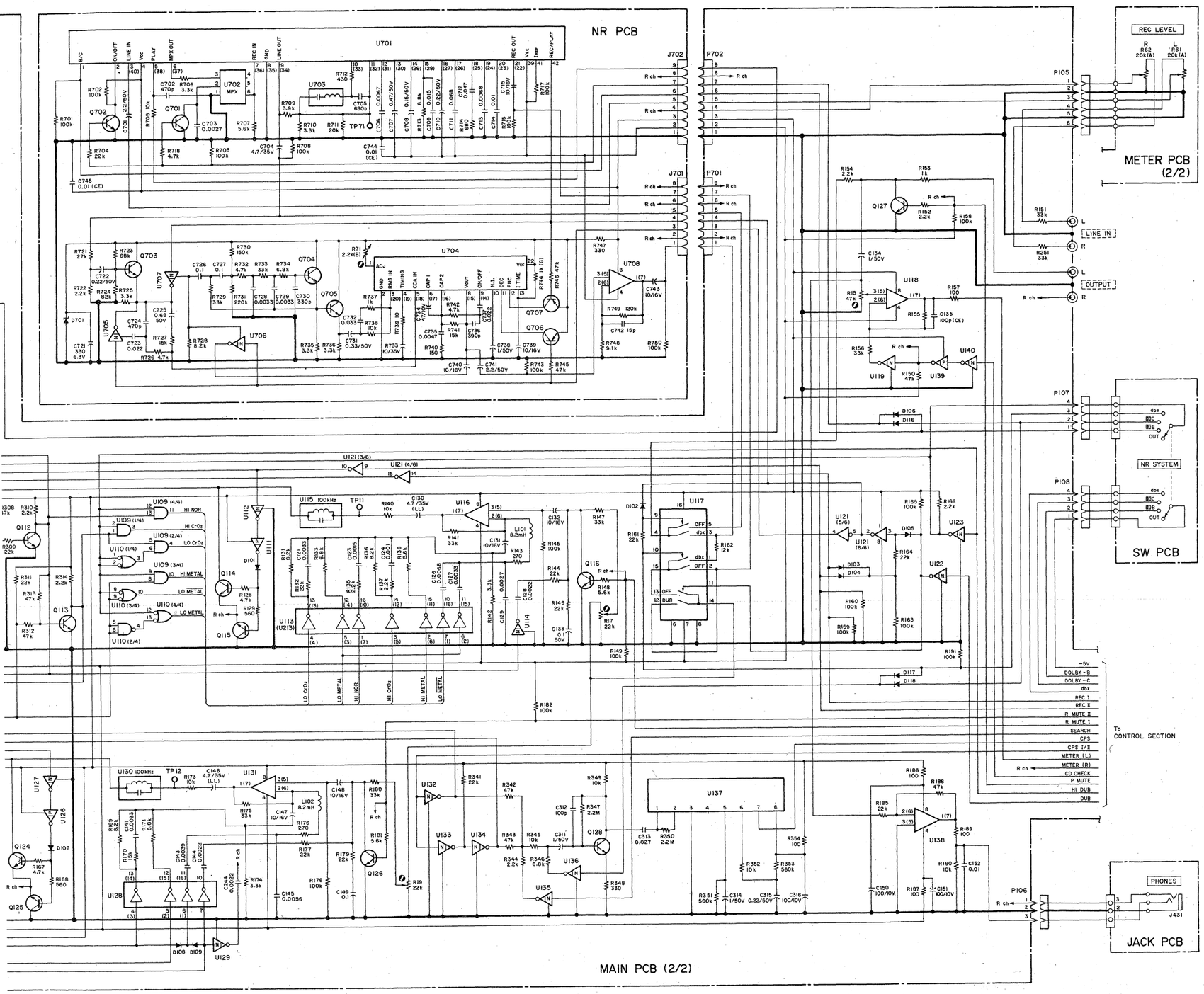


M5218L



TEAC SCHEMATIC DIAGRAM W-990RX





MAIN PCB (2/2)

U101, U102	M5220P
U103	BU4066B
U104	DTA124ES
U105	DTC124ES
U106	DTC124ES
U107	DTC124ES
U108	DTA143ES
U109	BU4081B
U110	BU4001B
U111	DTA124ES
U112	DTC124ES
U113 (U213)	BA6251
U114 (U214)	DTC124ES
U115 (U215)	BIAS TRAP
U116	M5218L
U117 (U217)	BU4053B
U118	M5218L
U119 (U219)	DTC124ES
U120	—
U121	M4049UBP
U122 ∿ U124	DTC124ES
U125	DTA143ES
U126	DTA124ES
U127	DTC124ES
U128	BA6251
U129	DTC124ES
U130 (U230)	BIAS TRAP
U131	M5218L
U132 ∿ U136	DTC124ES
U137	M51143AL
U138	M5218L
U139	DTA124ES
U140	DTC124ES
Q101 (Q201)	2SJ40D
Q102 (Q202)	2SJ40D
Q103 (Q203)	2SC2603F
Q104 (Q204)	2SC2603F
Q105 (Q205)	2SJ40D
Q106 (Q206)	2SC2603F
Q107 ∿ Q113	2SC2603F
Q114 (Q214)	2SC2603F
Q115	2SC2603F
Q116 (Q216)	2SD1450S,T
Q117 ∿ Q123	2SC2603F
Q124 (Q224)	2SC2603F
Q125	2SC2603F
Q126 (Q226)	2SD1450S,T
Q127 (Q227)	2SD1450S,T
Q128	2SC2603F
D101 ∿ D109	1SS133
D110	—
D111 ∿ D114	RD7.5ESB2
D115	—
D116 ∿ D118	1SS133

( ) : R ch

INSTRUCTIONS FOR SERVICE PERSONNEL

BEFORE RETURNING APPLIANCE TO THE CUSTOMER, MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPLOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT.

NOTES

1. Resistor values are in ohms (k=kilo-ohms, M=megohms).
2. Capacitor values are in microfarads (p=picofarads).
3. ⚠Parts marked with this sign are safety critical components. They must always be replaced with identical components-refer to the appropriate parts list and ensure exact replacement.

注意

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NR PCB

U701	CX-20187
U702 (U802)	MPX FILTER
U703 (U803)	LPF
U704	AN6291
U705 (U805)	DTC124TS
U706 (U806)	DTC124TS
U707 (U807)	DTC124TS
U708	M5218L
Q701 (Q801)	2SC2603F
Q702	2SC2603F
Q703 (Q803)	2SC2603F
Q704 (Q804)	2SC2603F
Q705 (Q805)	2SC2603F
Q706	2SA1115F
Q707	2SA1115F
D701	RD5.1ESB2

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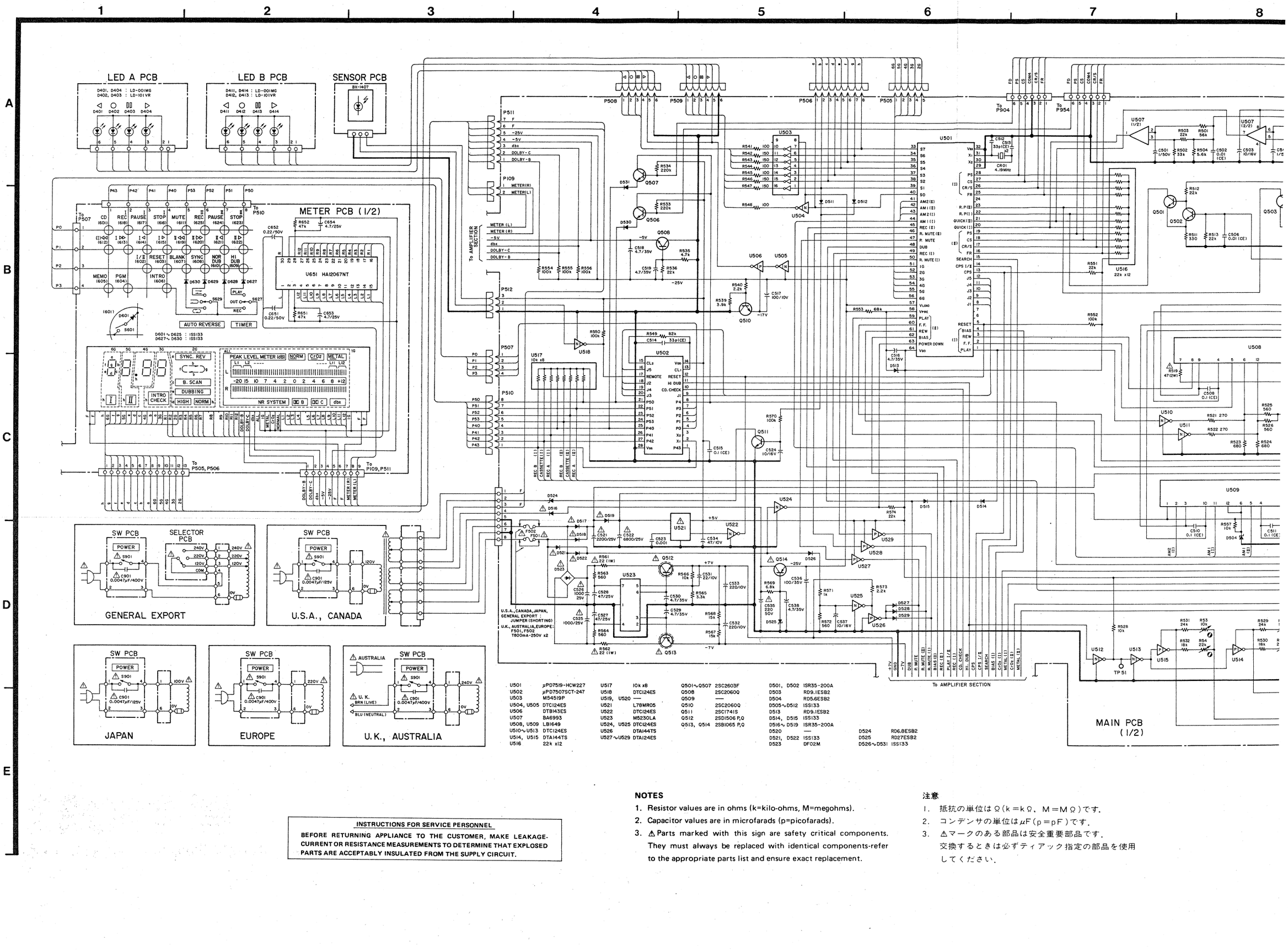
W-990RX

Stereo Double Reverse Cassette Deck

1st Issue; September, 1987

TEAC SCHEMATIC DIAGRAM W-990RX



U501	μPD7519-HCW227	U517	10k x8	Q501∿Q507	2SC2603F	D501, D502	ISR35-200A
U502	μPD7507SCT-247	U518	DTC124ES	Q508	2SC2060Q	D503	RD9.1ESB2
U503	M54519P	U519, U520	—	Q509	—	D504	RD5.6ESB2
U504, U505	DTC124ES	U521	L78MR05	Q510	2SC2060Q	D505∿D512	ISS133
U506	DTB143ES	U522	DTC124ES	Q511	2SC1741S	D513	RD9.1ESB2
U507	BA6993	U523	M5230LA	Q512	2SD1506 P,Q	D514, D515	ISS133
U508, U509	LB1649	U524, U525	DTC124ES	Q513, Q514	2SB1065 P,Q	D516∿D519	ISR35-200A
U510∿U513	DTC124ES	U526	DTA144TS			D520	—
U514, U515	DTA144TS	U527∿U529	DTA124ES			D521, D522	ISS133
U516	22k x12					D523	DF02M
						D524	RD6.8ESB2
						D525	RD27ESB2
						D526∿D531	ISS133

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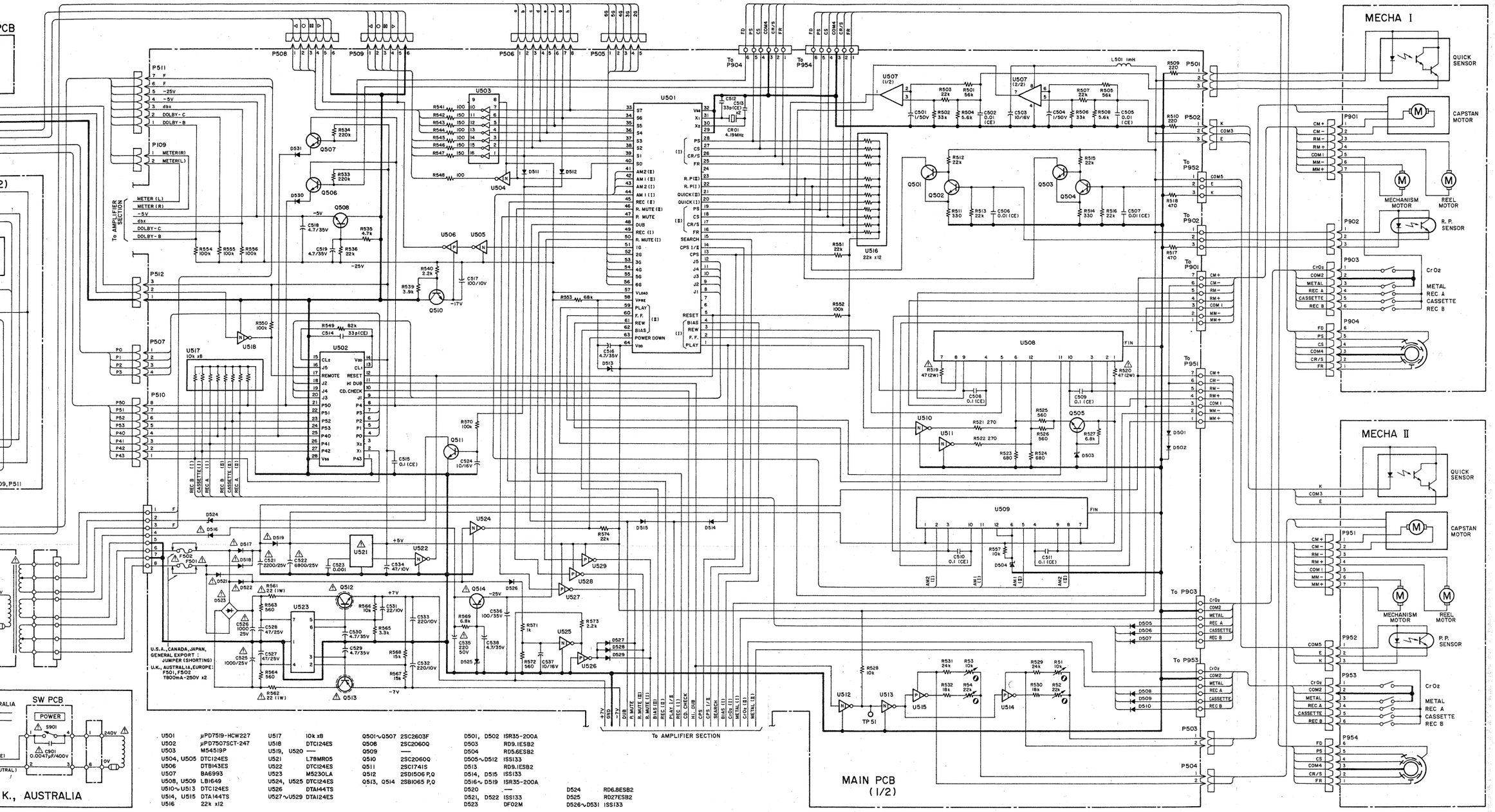

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U504, U505	DTC124ES	U521	L78MR05	Q510	2SC2060Q	D505∿D512	ISS133
U506	DTB143ES	U522	DTC124ES	Q511	2SC1741S	D513	RD9.1ESB2
U507	BA6993	U523	M5230LA	Q512	2SD1506 P,Q	D514, D515	ISS133
U508, U509	LB1649	U524, U525	DTC124ES	Q513, Q514	2SB1065 P,Q	D516∿D519	ISR35-200A
U510∿U513	DTC124ES	U526	DTA144TS			D520	—
U514, U515	DTA144TS	U527∿U529	DTA124ES			D521, D522	ISS133
U516	22k x12					D523	DF02M
						D524	RD6.8ESB2
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W-990RX

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